

10/040,647

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(FILE 'HOME' ENTERED AT 15:50:53 ON 15 MAR 2005)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:51:18 ON 15 MAR 2005

L1 590888 S PROTEINASE? OR PROTEASE?
L2 372973 S SERINE
L3 83547 S L1(A)L2
L4 35890 S HUMAN AND L3
L5 9 S "HELA2"
L6 312121 S ISOFORM?
L7 6 DUP REM L5 (3 DUPLICATES REMOVED)
L8 76 S TESTISIN
L9 63 S L4 AND L8
L10 25 DUP REM L9 (38 DUPLICATES REMOVED)
L11 3249 S L4 AND "L"
L12 74 S L6 AND L11
L13 49 DUP REM L12 (25 DUPLICATES REMOVED)
L14 137987 S TUMOR(A) SUPPRESSOR
L15 14 S L8 AND L14
L16 6 DUP REM L15 (8 DUPLICATES REMOVED)
E ANTALIS T M/AU
L17 280 S E3-E7
E HOOPER D/AU
L18 267 S E3
L19 547 S L17 OR L18
L20 100 S L4 AND L19
L21 32 S L20 AND L8
L22 13 DUP REM L21 (19 DUPLICATES REMOVED)

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NEWS	18	FEB 10	STN Patent Forums to be held in March 2005
NEWS	19	FEB 16	STN User Update to be held in conjunction with the 229th ACS National Meeting on March 13, 2005
NEWS	20	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	21	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	22	FEB 28	MEDLINE/LMEDLINE reloaded
NEWS	23	MAR 02	GBFULL: New full-text patent database on STN
NEWS	24	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	25	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS EXPRESS			JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
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	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

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FILE 'EMBASE' ENTERED AT 15:51:18 ON 15 MAR 2005
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FILE 'LIFESCI' ENTERED AT 15:51:18 ON 15 MAR 2005
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=> s proteinase? or protease?
L1 590888 PROTEINASE? OR PROTEASE?

=> s serine
L2 372973 SERINE

=> s l1(a)l2
L3 83547 L1(A) L2

=> s human and l3
L4 35890 HUMAN AND L3

=> s "HELA2"
L5 9 "HELA2"

=> s isoform?
L6 312121 ISOFORM?

=> dup rem 15

PROCESSING COMPLETED FOR L5
L7 6 DUP REM L5 (3 DUPLICATES REMOVED)

=> d 1-6 ibib ab

L7 ANSWER 1 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:542323 BIOSIS
DOCUMENT NUMBER: PREV200300544975
TITLE: Synthesis and antitumor activity of N-sulfonyl derivatives
of nucleobases and sulfonamido nucleoside derivatives.
AUTHOR(S): Zinic, B. [Reprint Author]; Krizmanic, I.; Glavas-Obrovac,
Lj.; Karner, I.; Zinic, M.
CORPORATE SOURCE: Ruder Boskovic Institute, Bijenicka 54, 10 000, Zagreb,
Croatia
bzinic@rudjer.irb.hr
SOURCE: Nucleosides Nucleotides & Nucleic Acids, (May-August 2003)
Vol. 22, No. 5-8, pp. 1623-1625. print.
ISSN: 1525-7770 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19 Nov 2003
Last Updated on STN: 19 Nov 2003

AB The introduction of sulfonamido group on the C-2 position of pyrimidine
nucleosides was achieved by ring opening of 2,2'- and 2,3-
anhydronucleosides. N-sulfonyl derivatives of nucleobases and sulfonamido
derivatives of nucleosides Were assayed for in vitro antitumor activity.

L7 ANSWER 2 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:303061 BIOSIS
DOCUMENT NUMBER: PREV200300303061
TITLE: TRF1 is degraded by ubiquitin-mediated proteolysis after
release from telomeres.
AUTHOR(S): Chang, William; Dynek, Jasmin N.; Smith, Susan [Reprint
Author]
CORPORATE SOURCE: Skirball Institute of Biomolecular Medicine, New York
University School of Medicine, New York, NY, 10016, USA
smithsu@saturn.med.nyu.edu
SOURCE: Genes & Development, (June 1 2003) Vol. 17, No. 11, pp.
1328-1333. print.
CODEN: GEDEEP. ISSN: 0890-9369.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 2 Jul 2003
Last Updated on STN: 2 Jul 2003

AB Mammalian telomeres are coated by the sequence-specific, DNA-binding
protein, TRF1, a negative regulator of telomere length. Previous results
showed that ADP-ribosylation of TRF1 by tankyrase 1 released TRF1 from
telomeres and promoted telomere elongation. We now show that loss of TRF1
from telomeres results in ubiquitination and degradation of TRF1 by the
proteasome and that degradation is required to keep TRF1 off telomeres.
Ubiquitination of TRF1 is regulated by its telomere-binding status; only
the telomere-unbound form of TRF1 is ubiquitinated. Our findings suggest
a novel mechanism of sequential posttranslational modification of TRF1
(ADP-ribosylation and ubiquitination) for regulating access of telomerase
to telomeres.

L7 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:42593 BIOSIS
DOCUMENT NUMBER: PREV200300042593
TITLE: DNA molecules encoding human **HELA2** or testisin
serine proteinases.
AUTHOR(S): Antalis, Toni Marie [Inventor, Reprint Author]; Hooper,
John David [Inventor]

CORPORATE SOURCE: Toowong, Australia
ASSIGNEE: Amrad Operations Pty., Ltd., Victoria, Australia
PATENT INFORMATION: US 6479274 November 12, 2002
SOURCE: Official Gazette of the United States Patent and Trademark
Office Patents, (Nov 12 2002) Vol. 1264, No. 2.
<http://www.uspto.gov/web/menu/patdata.html>. e-file.
ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Jan 2003
Last Updated on STN: 15 Jan 2003

AB The present invention related generally to novel molecules and more particularly novel proteinaceous molecules involved in or associated with regulation of cell activities and/or viability. The present invention is particularly directed to novel serine proteinases and a novel kinase and to derivatives, agonists and antagonists thereof. In one embodiment, the present invention provides a novel serine proteinase, referred to herein as "**HELA2**" or "testisin", which has roles in spermatogenesis, in suppressing testicular cancer and as a marker for cancers.

L7 ANSWER 4 OF 6 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
DUPLICATE 1

ACCESSION NUMBER: 1998-10406 BIOTECHDS
TITLE: New serine proteases and kinase involved in regulating cell activity and viability;
serine protease **HELA2** used to regulate cell activity and viability particularly in the testes, for promotion of sperm production, and diagnosis and suppression of cancer, especially testicular cancer
AUTHOR: Antalıs T M; Hooper J D
PATENT ASSIGNEE: Amrad-Oper.
LOCATION: Richmond, Victoria, Australia.
PATENT INFO: WO 9836054 20 Aug 1998
APPLICATION INFO: WO 1998-AU85 13 Feb 1998
PRIORITY INFO: AU 1997-422 18 Nov 1997; AU 1997-5101 13 Feb 1997
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 1998-480768 [41]

AB An isolated proteinaceous molecule (A), e.g. **HELA2** (or testin), associated with regulation of cell activity or viability is claimed. (A) is a serine protease and can be amplified by the polymerase chain reaction, using the given DNA primers. (A) can also be any protein with at least 50% identity to the given protein sequences, or encoded by a nucleic acid with at least 50% similarity to the given DNA sequences. Alternatively (A) can be a kinase with a given protein and DNA sequence. Also claimed is a method of regulating cell activity or viability by contacting it with (A). The claims also cover a method of modulating mammal fertility by modulating levels of (A), increasing its levels by introduction of recombinant (A) to facilitate sperm maturation and development. Also covered is a composition containing (A), and an antibody, agonist and antagonist (antisense or ribozyme) capable of interacting with (A). The claims extend to a method of diagnosing cancer or a predisposition to cancer by determining the presence of a sequence encoding (A), as **HELA2** is a suppressor of testicular cancer.
(167pp)

L7 ANSWER 5 OF 6 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 82162946 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6175442
TITLE: Drug-induced biochemical markers of cancer in cervical carcinoma cells.
AUTHOR: Ghosh N K
SOURCE: Clinical biochemistry, (1982 Feb) 15 (1) 28-33.

Journal code: 0133660. ISSN: 0009-9120.
PUB. COUNTRY: Canada
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198206
ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 19990129
Entered Medline: 19820614

AB The elevation in the serum level of CEA in cancer patients undergoing treatment with 5-FU and other antitumor drugs has been reported. In the present study, the ectopic synthesis of multiple carcino-placental markers has been observed to be induced (10- to 264-fold) simultaneously in the same cervical carcinoma cells (HeLa65, HeLa71 and HeLa2.2) by hydroxyurea and sodium butyrate. Among the drug-induced biochemical markers observed in HeLa cells are four sialopeptides. Regan Isoenzyme (Placental Isoenzyme of Alkaline Phosphatase), HCT-Beta, FSH-Beta, HCG-Alpha and also a steroid hormone, Progesterone. The peptide and steroid hormones were quantitated by specific radioimmunoassays (RIA), in cultured cells, media, and homogenates of tumor tissues. The induction of biochemical markers was observed also with lung carcinoma cells. That multiple polypeptides, or steroids regulated by them, are simultaneously inducible in the same cancer cells, suggest the proximity on the DNA strand of several oncofetal and oncoplacental genes derepressed by antineoplastic drugs. This fundamental study has had important clinical ramifications. The results may be used to recognize the retention by cancer patients of occult malignancy after radiotherapy or surgery. The unsuspected metastasis may be reflected by a transient rise in the serum level of these markers during chemotherapy with anticancer drugs, which specifically inhibit DNA replication without interfering with the transcription of messenger-RNA and subsequent translation of proteins. The drug-induced protein-hormones, observed in this study, are the products of activated trophoblastic/pituitary genes in the nondividing DNA of neoplastic cells.

L7 ANSWER 6 OF 6 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 78055825 MEDLINE
DOCUMENT NUMBER: PubMed ID: 73243
TITLE: [Karyological study of the continuous cell lines.
Comparative analysis of the HeLa and Detroit-6 cell lines].
Kariologicheskoe issledovanie perevivaemykh kletochnykh
linii. I. Sravnitel'nyi analiz linii HeLa i Detroit-6.
AUTHOR: Mikhailova G R; Rodova M A; Gadashevich V N; Demidova S A;
Zhdanov V M
SOURCE: Tsitologiya, (1977 Jul) 19 (7) 786-90.
Journal code: 0417363. ISSN: 0041-3771.
PUB. COUNTRY: USSR
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197801
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19970203
Entered Medline: 19780127

AB Comparison of the results of the karyologic analysis of two HeLa cell sublines (HeLa1 and HeLa2), obtained from different sources, and of Detroit-6 cell line has shown that all the lines contain marker chromosomes characteristic of the HeLa cell line. Detroit-6 cell line marker chromosomes are similar to markers of the HeLa subline (HeLa1). At the same time, part of marker chromosomes in the two sublines of HeLa cell line (HeLa1 and HeLa2) are different. These data show that HeLa1 and Detroit-6 cell lines are more similar than two sublines of the same HeLa cell line.

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FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:51:18 ON 15 MAR 2005

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L3 83547 S L1(A)L2
L4 35890 S HUMAN AND L3
L5 9 S "HELA2"
L6 312121 S ISOFORM?
L7 6 DUP REM L5 (3 DUPLICATES REMOVED)

=> s testisin

L8 76 TESTISIN

=> s l4 and l8

L9 63 L4 AND L8

=> dup rem l9

PROCESSING COMPLETED FOR L9

L10 25 DUP REM L9 (38 DUPLICATES REMOVED)

=> d 1-25 ibib ab

L10 ANSWER 1 OF 25 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2005076305 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 15705885
TITLE: **Testisin**, a glycosyl-phosphatidylinositol-linked
serine protease, promotes malignant
transformation in vitro and in vivo.
AUTHOR: Tang Tenny; Kmet Muriel; Corral Laura; Vartanian Steffan;
Tobler Andreas; Papkoff Jackie
CORPORATE SOURCE: diaDexus Inc., 343 Oyster Point Boulevard, South San
Francisco, CA 94080, USA.. jppapkoff@diadexus.com
SOURCE: Cancer research, (2005 Feb 1) 65 (3) 868-78.
Journal code: 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20050212
Last Updated on STN: 20050217

AB **Human testisin**, a **serine protease**,
is highly expressed in ovarian cancer and premeiotic spermatocytes with
relatively little expression in other normal tissues. We first showed
that **testisin** was localized on the surface of cultured tumor
cells as a glycosyl-phosphatidylinositol-linked protein. We next explored
the biological function of **testisin** in malignant transformation
through manipulation of **testisin** expression in cell culture
model systems. Small interfering RNA-mediated knockdown of endogenous
testisin mRNA and protein expression in tumor cell lines led to
increased apoptosis and diminished growth in soft agar. Conversely,
overexpression of **testisin** in an epithelial cell line induced
colony formation in soft agar as well as s.c. tumor growth in severe
combined immunodeficient mice. A catalytic domain mutant was unable to
induce soft-agar growth indicating that **testisin** protease
activity is required for transformation. Ectopic expression of
testisin in a **human** ovarian cancer cell line without
endogenous **testisin** expression, led to the formation of larger

tumors in severe combined immunodeficient mice. Data presented here provide the first demonstration that **testisin** can promote cellular processes that drive malignant transformation. Our functional data coupled with the restricted normal tissue distribution of **testisin** and its overexpression in a majority of ovarian cancers validates this cell surface protein as a target for therapeutic intervention.

L10 ANSWER 2 OF 25 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2005095048 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 15685234
TITLE: Hypermethylation of the 5' CpG island of the gene encoding the **serine protease Testisin** promotes its loss in testicular tumorigenesis.
AUTHOR: Manton K J; Douglas M L; Netzel-Arnett S; Fitzpatrick D R; Nicol D L; Boyd A W; Clements J A; Antalis T M
CORPORATE SOURCE: [1] 1Leukaemia Foundation and Cellular Oncology Laboratories, Queensland Institute of Medical Research, Queensland, Australia [2] 2School of Life Science, Queensland University of Technology, Queensland, Australia.
SOURCE: British journal of cancer, (2005 Feb 28) 92 (4) 760-9.
Journal code: 0370635. ISSN: 0007-0920.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: NONMEDLINE; IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20050224
Last Updated on STN: 20050224

AB The **Testisin** gene (PRSS21) encodes a glycosylphosphatidylinositol (GPI)-linked **serine protease** that exhibits testis tissue-specific expression. Loss of **Testisin** has been implicated in testicular tumorigenesis, but its role in testis biology and tumorigenesis is not known. Here we have investigated the role of CpG methylation in **Testisin** gene inactivation and tested the hypothesis that **Testisin** may act as a tumour suppressor for testicular tumorigenesis. Using sequence analysis of bisulphite-treated genomic DNA, we find a strong relationship between hypermethylation of a 385 bp 5' CpG rich island of the **Testisin** gene, and silencing of the **Testisin** gene in a range of **human** tumour cell lines and in 100% (eight/eight) of testicular germ cell tumours. We show that treatment of **Testisin**-negative cell lines with demethylating agents and/or a histone deacetylase inhibitor results in reactivation of **Testisin** gene expression, implicating hypermethylation in **Testisin** gene silencing. Stable expression of **Testisin** in the **Testisin**-negative Tera-2 testicular cancer line suppressed tumorigenicity as revealed by inhibition of both anchorage-dependent cell growth and tumour formation in an SCID mouse model of testicular tumorigenesis. Together, these data show that loss of **Testisin** is caused, at least in part, by DNA hypermethylation and histone deacetylation, and suggest a tumour suppressor role for **Testisin** in testicular tumorigenesis. British Journal of Cancer (2005) 92, 760-769. doi:10.1038/sj.bjc.6602373 www.bjcancer.com Published online 1 February 2005.

L10 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:355085 HCAPLUS
DOCUMENT NUMBER: 140:369944
TITLE: **Human** tissue-specific housekeeping genes identified by expression profiling
INVENTOR(S): Aburatani, Hiroyuki; Yamamoto, Shogo
PATENT ASSIGNEE(S): NGK Insulators, Ltd., Japan
SOURCE: PCT Int. Appl., 372 pp.

DOCUMENT TYPE: CODEN: PIXXD2
LANGUAGE: Patent
FAMILY ACC. NUM. COUNT: Japanese
PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004035785	A1	20040429	WO 2002-JP10753	20021016
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2004229233	A1	20041118	US 2003-684422	20031015
PRIORITY APPLN. INFO.:			US 2002-418614P	P 20021016
			WO 2002-JP10753	W 20021016

AB Housekeeping genes commonly expressed in 35 different **human** tissues, oligonucleotide probes and DNA microarrays containing them, are disclosed.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
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ACCESSION NUMBER: 2004090618 EMBASE
TITLE: Immunological treatment of ovarian cancer.
AUTHOR: Cannon M.J.; Santin A.D.; O'Brien T.J.
CORPORATE SOURCE: M.J. Cannon, Dept. of Microbiology and Immunology, Univ. of AR for Medical Sciences, 4301 West Markham, Little Rock, AR 72205, United States. mcannon@uams.edu
SOURCE: Current Opinion in Obstetrics and Gynecology, (2004) 16/1 (87-92).
Refs: 32
ISSN: 1040-872X CODEN: COOGEA
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 010 Obstetrics and Gynecology
016 Cancer
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Purpose of review: Development of immunological treatments for ovarian cancer has not been a conspicuous success story over the past few years. Only a handful of clinical trials have reported immunological responses, and correlation with clinical benefit has been elusive. Several recent studies presented in this review, however, point to a revival of optimism for the development of novel immunotherapeutic strategies. Recent findings: The cloning and sequencing of CA125, coupled with novel structural and functional insights, undoubtedly represent important steps forward. The possibility that CA125 could play a role in evasion of immunity by ovarian tumors may represent a new challenge, but does not detract from its potential as a therapeutic target. Of the recent clinical trial reports, the most intriguing results were seen from immunotherapy with a conventional mouse monoclonal antibody specific for CA125, in which **human** anti-mouse antibody responses correlated significantly with improved survival of patients with advanced stage ovarian cancer and

clinical evidence of recurrent disease at the time of treatment. Summary: There is little doubt that CA125 will undergo a renaissance as an important target antigen for development of novel immunological treatments, particularly with regard to cellular therapies. Identification of other novel ovarian tumor antigens will also accelerate research focused on stimulation of T-cell immunity. Current research trends suggest a paradigm shift in emphasis from vaccines designed to elicit antibody responses to strategies such as dendritic cell vaccination that are designed to induce broader immunity, including ovarian tumor antigen-specific helper T-lymphocyte and cytotoxic T-lymphocyte responses.

L10 ANSWER 5 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 3

ACCESSION NUMBER: 2004:438005 BIOSIS
DOCUMENT NUMBER: PREV200400438138
TITLE: On the biological function of **testisin**: A
membrane **serine protease** expressed
specifically during spermatogenesis.
AUTHOR(S): Netzel-Arnett, S.; Haudenschild, C. C.; Bugge, T. H.;
Antalis, T. M.
SOURCE: Journal of Andrology, (March 2004) No. Suppl. S, pp. 55.
print.
Meeting Info.: 29th Annual Meeting of the American Society
of Andrology. Baltimore, MD, USA. April 17-20, 2004.
American Society of Andrology.
ISSN: 0196-3635 (ISSN print).
DOCUMENT TYPE: Conference; (Meeting)
Conference; (Meeting Poster)
LANGUAGE: English
ENTRY DATE: Entered STN: 17 Nov 2004
Last Updated on STN: 17 Nov 2004

L10 ANSWER 6 OF 25 MEDLINE on STN DUPLICATE 4

ACCESSION NUMBER: 2003042790 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12441343
TITLE: Structure and activity of **human** pancreasin, a
novel tryptic serine peptidase expressed primarily by the
pancreas.
AUTHOR: Bhagwandin Vikash J; Hau Leola W-T; Mallen-St Clair Jon;
Wolters Paul J; Caughey George H
CORPORATE SOURCE: Cardiovascular Research Institute and Department of
Medicine, University of California at San Francisco,
California 94143-0911, USA.
CONTRACT NUMBER: HL-24136 (NHLBI)
SOURCE: Journal of biological chemistry, (2003 Jan 31) 278 (5)
3363-71. Electronic Publication: 2002-11-18.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AY030095
ENTRY MONTH: 200304
ENTRY DATE: Entered STN: 20030129
Last Updated on STN: 20030404
Entered Medline: 20030403

AB In a search for genes encoding the serine peptidases prostatic and
testisin, which are expressed mainly in prostate and testis,
respectively, we identified a related, novel gene. Sequencing of cDNA
allowed us to deduce the full amino acid sequence of the **human**
gene product, which we term "pancreasin" because it is transcribed
strongly in the pancreas. The idiosyncratic 6-exon organization of the
gene is shared by a small group of tryptic proteases, including prostatic,

testisin, and gamma-tryptase. Like the other genes, the pancreasin gene resides on chromosome 16p. Pancreasin cDNA predicts a 290-residue, N-glycosylated, serine peptidase with a typical signal peptide, a 12-residue activation peptide cleaved by tryptic hydrolysis, and a 256-amino acid catalytic domain. Unlike prostatic and other close relatives, **human** pancreasin and a nearly identical chimpanzee homologue lack a carboxyl-terminal membrane anchor, although this is present in 328-residue mouse pancreasin, the cDNA of which we also cloned and sequenced. In marked contrast to prostatic, which is 43% identical in the catalytic domain, **human** pancreasin is transcribed strongly in pancreas (and in the pancreatic ductal adenocarcinoma line, HPAC) but weakly or not at all in kidney and prostate. Antibodies raised against pancreasin detect cytoplasmic expression in HPAC cells. Recombinant, epitope-tagged pancreasin expressed in Chinese hamster ovary cells is glycosylated and secreted as an active tryptic peptidase. Pancreasin's preferences for hydrolysis of extended peptide substrates feature a strong preference for P1 Arg and differ from those of trypsin. Pancreasin is inhibited by benzamidine and leupeptin but resists several classic inhibitors of trypsin. Thus, pancreasin is a secreted, tryptic **serine protease** of the pancreas with novel physical and enzymatic properties. These studies provide a rationale for exploring the natural targets and roles of this enzyme.

L10 ANSWER 7 OF 25 MEDLINE on STN DUPLICATE 5
 ACCESSION NUMBER: 2003111572 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 12624642
 TITLE: Endothelial cell **serine proteases**
 expressed during vascular morphogenesis and angiogenesis.
 AUTHOR: Aimes Ronald T; Zijlstra Andries; Hooper John D; Ogbourne
 Steven M; Sit Mae-Le; Fuchs Simone; Gotley David C; Quigley
 James P; Antalio Toni M
 CORPORATE SOURCE: Department of Cell Biology, The Scripps Research Institute,
 La Jolla, California, USA.
 CONTRACT NUMBER: P01 HL31950 (NHLBI)
 R01 CA65660 (NCI)
 T32 HL07695 (NHLBI)
 SOURCE: Thrombosis and haemostasis, (2003 Mar) 89 (3) 561-72.
 Journal code: 7608063. ISSN: 0340-6245.
 PUB. COUNTRY: Germany: Germany, Federal Republic of
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200310
 ENTRY DATE: Entered STN: 20030308
 Last Updated on STN: 20031031
 Entered Medline: 20031030
 AB Many **serine proteases** play important regulatory roles
 in complex biological systems, but only a few have been linked directly
 with capillary morphogenesis and angiogenesis. Here we provide evidence
 that **serine protease** activities, independent of the
 plasminogen activation cascade, are required for microvascular endothelial
 cell reorganization and capillary morphogenesis in vitro. A homology
 cloning approach targeting conserved motifs present in all **serine**
proteases, was used to identify candidate **serine**
proteases involved in these processes, and revealed 5 genes
 (acrosin, **testisin**, neurosin, PSP and neurotrypsin), none of
 which had been associated previously with expression in endothelial cells.
 A subsequent gene-specific RT-PCR screen for 22 **serine**
proteases confirmed expression of these 5 genes and identified 7
 additional **serine protease** genes expressed by
human endothelial cells, urokinase-type plasminogen activator,
 protein C, TMPRSS2, hepsin, matriptase/MT-SP1, dipeptidylpeptidase IV, and
 seprase. Differences in **serine protease** gene

expression between microvascular and **human** umbilical vein endothelial cells (HUVECs) were identified and several **serine protease** genes were found to be regulated by the nature of the substratum, ie. artificial basement membrane or fibrillar type I collagen. mRNA transcripts of several **serine protease** genes were associated with blood vessels in vivo by in situ hybridization of **human** tissue specimens. These data suggest a potential role for **serine proteases**, not previously associated with endothelium, in vascular function and angiogenesis.

L10 ANSWER 8 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
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ACCESSION NUMBER: 2003193798 EMBASE
TITLE: Membrane anchored **serine proteases**: A rapidly expanding group of cell surface proteolytic enzymes with potential roles in cancer.
AUTHOR: Netzel-Arnett S.; Hooper J.D.; Szabo R.; Madison E.L.; Quigley J.P.; Bugge T.H.; Antalis T.M.
CORPORATE SOURCE: United States. antalist@usa.redcross.org
SOURCE: Cancer and Metastasis Reviews, (2003) 22/2-3 (237-258).
Refs: 146
ISSN: 0167-7659 CODEN: CMRED4
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
016 Cancer
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Dysregulated proteolysis is a hallmark of cancer. Malignant cells require a range of proteolytic activities to enable growth, survival, and expansion. **Serine proteases** of the S1 or trypsin-like family have well recognized roles in the maintenance of normal homeostasis as well as in the pathology of diseases such as cancer. Recently a rapidly expanding subgroup of S1 proteases has been recognized that are directly anchored to plasma membranes. These membrane anchored **serine proteases** are anchored either via a carboxy-terminal transmembrane domain (Type I), a carboxy terminal hydrophobic region that functions as a signal for membrane attachment via a glycosyl-phosphatidylinositol linkage (GPI-anchored), or via an amino terminal proximal transmembrane domain (Type II or TTSP). The TTSPs also encode multiple domains in their stem regions that may function in regulatory interactions. The **serine protease** catalytic domains of these enzymes show high homology but also possess features indicating unique substrate specificities. It is likely that the membrane anchored **serine proteases** have evolved to perform complex functions in the regulation of cellular signaling events at the plasma membrane and within the extracellular matrix. Disruption or mutation of several of the genes encoding these proteases are associated with disease. Many of the membrane anchored **serine proteases** show restricted tissue distribution in normal cells, but their expression is widely dysregulated during tumor growth and progression. Diagnostic or therapeutic targeting of the membrane anchored **serine proteases** has potential as promising new approaches for the treatment of cancer and other diseases.

L10 ANSWER 9 OF 25 MEDLINE on STN DUPLICATE 6
ACCESSION NUMBER: 2003116802 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12630572
TITLE: Cloning, expression analysis, and tissue distribution of esp-1/**testisin**, a membrane-type **serine protease** from the rat.
AUTHOR: Nakamura Yasuo; Inoue Masahiro; Okumura Yuushi; Shiota Mayumi; Nishikawa Mai; Arase Seiji; Kido Hiroshi

CORPORATE SOURCE: Department of Dermatology, The University of Tokushima
School of Medicine, Tokushima, Japan.
SOURCE: journal of medical investigation : JMI, (2003 Feb) 50 (1-2)
78-86.
Journal code: 9716841. ISSN: 1343-1420.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200305
ENTRY DATE: Entered STN: 20030313
Last Updated on STN: 20030513
Entered Medline: 20030509

AB Esp-1/**testisin**, a **serine protease** abundantly expressed in **human** and mouse testis, is presumed to play an important role in the process of spermatogenesis and fertilization. In this study, we cloned an esp-1/**testisin** cDNA from rats, and analyzed its expression and tissue distribution. The isolated cDNA consisted of 1099 nucleotides with a single open reading frame encoding 328 amino acids and an expected molecular mass of 36.6 kDa. The deduced amino acid sequence of rat Esp-1/**Testisin** had 89% and 62% identity with its murine and **human** counterparts, respectively, and appeared to be a trypsin-type **serine protease** with a hydrophobic region at the C-terminus. By quantitative real-time polymerase chain reaction analysis, rat esp-1/**testisin** mRNA was predominantly expressed in testis, as in **human** and mouse. However, its immunohistochemical distribution was predominantly in the elongated spermatids at steps 12 to 19, and not in the primary spermatocytes and round spermatids. This different distribution profile suggests that Esp-1/**Testisin** plays a role in species-specific proteolytic events during spermatogenesis and fertilization.

L10 ANSWER 10 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN

ACCESSION NUMBER: 2003182824 EMBASE
TITLE: Genomic overview of **serine proteases**.
AUTHOR: Yousef G.M.; Kopolovic A.D.; Elliott M.B.; Diamandis E.P.
CORPORATE SOURCE: E.P. Diamandis, Dept. of Pathol./Laboratory Medicine, Mount
Sinai Hospital, Toronto, Ont. M5G 1X5, Canada.
ediamandis@mtsinai.on.ca
SOURCE: Biochemical and Biophysical Research Communications, (23
May 2003) 305/1 (28-36).
Refs: 39
ISSN: 0006-291X CODEN: BBRCA
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 003 Endocrinology
005 General Pathology and Pathological Anatomy
022 Human Genetics
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB **Serine proteases** (SP) are peptidases with a uniquely activated serine residue in the substrate-binding pocket. They represent about 0.6% of all proteins in the **human** genome. SP are involved in many vital functions such as digestion, blood clotting, fibrinolysis, fertilization, and complement activation and are related to many diseases including cancer, arthritis, and emphysema. In this study, we performed a genomic analysis of **human serine proteases** utilizing different databases, primarily that of MEROPS. SP are distributed along all **human** chromosomes except 18 and Y with the highest density (23 genes) on chromosome 19. They are either randomly located within the genome or occur in clusters. We identified a number of

SP clusters, the largest being the kallikrein cluster on chromosome 19q13.4 which is formed of 15 adjacent genes. Other clusters are located on chromosomes 19p13, 16p13, 14q11, 13q35, 11q22, and 7q35. Genes of each cluster tend to be of comparable sizes and to be transcribed in the same direction. The members of some clusters are sometimes functionally related, e.g., the involvement of many kallikreins in endocrine-related malignancies and the hematopoietic cluster on chromosome 14. It is hypothesized that members of some clusters are under common regulatory mechanisms and might be involved in cascade enzymatic pathways. Several functional domains are found in SP, which reflect their functional diversity. Membrane-type SP tend to cluster in 3 chromosomes and have some common structural domains. Several databases are available for screening, structural and functional analysis of **serine proteases**. With the near completion of the **Human** Genome Project, research will be more focused on the interactions between SP and their involvement in pathophysiological processes. .COPYRGT. 2003 Elsevier Science (USA). All rights reserved.

L10 ANSWER 11 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:42593 BIOSIS
DOCUMENT NUMBER: PREV200300042593
TITLE: DNA molecules encoding **human** HELA2 or **testisin serine proteinases**.
AUTHOR(S): Antalis, Toni Marie [Inventor, Reprint Author]; Hooper, John David [Inventor]
CORPORATE SOURCE: Toowong, Australia
ASSIGNEE: Amrad Operations Pty., Ltd., Victoria, Australia
PATENT INFORMATION: US 6479274 November 12, 2002
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Nov 12 2002) Vol. 1264, No. 2.
<http://www.uspto.gov/web/menu/patdata.html>. e-file.
ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Jan 2003
Last Updated on STN: 15 Jan 2003

AB The present invention related generally to novel molecules and more particularly novel proteinaceous molecules involved in or associated with regulation of cell activities and/or viability. The present invention is particularly directed to novel **serine proteinases** and a novel kinase and to derivatives, agonists and antagonists thereof. In one embodiment, the present invention provides a novel **serine proteinase**, referred to herein as "HELA2" or "**testisin**", which has roles in spermatogenesis, in suppressing testicular cancer and as a marker for cancers.

L10 ANSWER 12 OF 25 MEDLINE on STN DUPLICATE 7

ACCESSION NUMBER: 2002253113 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11861648
TITLE: A mouse **serine protease** TESP5 is selectively included into lipid rafts of sperm membrane presumably as a glycosylphosphatidylinositol-anchored protein.
AUTHOR: Honda Arata; Yamagata Kazuo; Sugiura Shin; Watanabe Katsuto; Baba Tadashi
CORPORATE SOURCE: Institute of Applied Biochemistry, University of Tsukuba, Tsukuba Science City, Ibaraki 305-8572, Japan.
SOURCE: Journal of biological chemistry, (2002 May 10) 277 (19) 16976-84. Electronic Publication: 2002-02-22.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AB059414; GENBANK-AB059415
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 20020507
Last Updated on STN: 20030105
Entered Medline: 20020613

AB We have previously indicated that at least in mouse, sperm **serine protease(s)** other than acrosin probably act on the limited proteolysis of egg zona pellucida to create a penetration pathway for motile sperm, although the participation of acrosin cannot be ruled out completely. A 42-kDa gelatin-hydrolyzing **serine protease** present in mouse sperm is a candidate enzyme involved in the sperm penetration of the zona pellucida. In this study, we have PCR-amplified an EST clone encoding a testicular **serine protease**, termed TESP5, and then screened a mouse genomic DNA library using the DNA fragment as a probe. The DNA sequence of the isolated genomic clones indicated that the TESP5 gene is identical to the genes coding for testicular **testisin** and eosinophilic esp-1. Immunochemical analysis using affinity-purified anti-TESP5 antibody revealed that 42- and 41-kDa forms of TESP5 with the isoelectric points of 5.0 to 5.5 are localized in the head, cytoplasmic droplet, and midpiece of cauda epididymal sperm probably as a membranous protein. Moreover, these two forms of TESP5 were selectively included into Triton X-100-insoluble microdomains, lipid rafts, of the sperm membranes. These results show the identity between TESP5/**testisin**/esp-1 and the 42-kDa sperm **serine protease**. When HEK293 cells were transformed by an expression plasmid carrying the entire protein-coding region of TESP5, the recombinant protein produced was released from the cell membrane by treatment with *Bacillus cereus* phosphatidylinositol-specific phospholipase C, indicating that TESP5 is glycosylphosphatidylinositol-anchored on the cell surface. Enzymatic properties of recombinant TESP5 was similar to but distinguished from those of rat acrosin and pancreatic trypsin by the substrate specificity and inhibitory effects of **serine protease** inhibitors.

L10 ANSWER 13 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:396970 BIOSIS
DOCUMENT NUMBER: PREV200200396970
TITLE: Genomic organization, flanking regions and recombinant expression of mouse prostasin (prss8).
AUTHOR(S): Verghese, George M. [Reprint author]; Caughey, George H. [Reprint author]
CORPORATE SOURCE: Department of Medicine, Cardiovascular Research Institute, University of California, San Francisco, 90 Medical Center Way, Box 0911, San Francisco, CA, 94143-0911, USA
SOURCE: FASEB Journal, (March 22, 2002) Vol. 16, No. 5, pp. A1194. print.
Meeting Info.: Annual Meeting of Professional Research Scientists on Experimental Biology. New Orleans, Louisiana, USA. April 20-24, 2002.
CODEN: FAJOEC. ISSN: 0892-6638.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Jul 2002
Last Updated on STN: 24 Jul 2002

AB Proastasin is a member of a multigene **serine protease** family and is implicated in epithelial ion channel regulation and tumor invasion. Current goals are to define gene structure and regulatory regions of mouse prostasin and to characterize its protease activity. Prss8 was cloned from a 129Sv/J mouse genomic BAC library; transcription

start sites were identified by RNA-ligase mediated 5' rapid amplification of cDNA ends. Putative 5' regulatory domains were identified by comparison to TRANSFAC4.0. 4.3kb prss8 gene spans 6 exons organized like **human** prostasin, tryptase-gamma, **testisin** and DISP. Signal tagged sites localize prss8 to chromosome 7 in an area synteneic to **human** 16p11. Prss8 3' untranslated region (UTR) and flank overlap a putative orthologue of **human** MOF. Transcription start sites in 2 initiator elements and a variably spliced 5' UTR intron transcribe 5' UTR variants of mature mProstasin mRNA. The TATA-less promoter, like **human** prostasin, contains GC and CAAT boxes. Recombinant mProstasin was expressed in insect cells for biochemical characterization. These data provide a basis to study regulation and function of prostasin in mouse models.

L10 ANSWER 14 OF 25 MEDLINE on STN DUPLICATE 8
 ACCESSION NUMBER: 2002292120 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 12032451
 TITLE: Novel immunotherapeutic strategies in gynecologic oncology. Dendritic cell-based immunotherapy for ovarian cancer.
 AUTHOR: Santin A D; Bellone S; Underwood L J; O'Brien T J; Ravaggi A; Pecorelli S; Cannon M J
 CORPORATE SOURCE: Department of Otolaryngology, University of Arkansas for Medical Sciences, USA.. santinalessandro@uams.edu
 SOURCE: Minerva ginecologica, (2002 Apr) 54 (2) 133-44. Ref: 80
 Journal code: 0400731. ISSN: 0026-4784.
 PUB. COUNTRY: Italy
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 (REVIEW, TUTORIAL)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200210
 ENTRY DATE: Entered STN: 20020529
 Last Updated on STN: 20021002
 Entered Medline: 20021001

AB The recognition of tumor antigen loaded dendritic cells as one of the most promising approaches to induce a tumor specific immune response in vivo has recently generated widespread interest in the use of these natural adjuvants for the therapy of **human** malignancies refractory to standard treatment modalities. However, many cancer patients may not benefit from current strategies of cancer vaccination because an effective tumor antigen associated with their cancer has not yet been identified or because sufficient amounts of tumor tissue cannot be obtained for antigen preparation. The recent identification and cloning of a group of preferentially expressed **serine proteases** as novel ovarian tumor-associated antigens may offer the opportunity to test in a large group of patients the potential of DC-based immunotherapy. In this review, we describe these ovarian tumor antigens and assess the potential for therapeutic DC vaccination for the treatment of chemotherapy-resistant ovarian cancer.

L10 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:168113 HCAPLUS
 DOCUMENT NUMBER: 134:217996
 TITLE: Expression vector systems for expression and activation of **serine protease** zymogens
 INVENTOR(S): Darrow, Andrew; Qi, Jenson; Andrade-Gordon, Patricia
 PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA
 SOURCE: PCT Int. Appl., 174 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001016289	A2	20010308	WO 2000-US22283	20000814
WO 2001016289	A3	20010907		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6420157	B1	20020716	US 1999-386642	19990831
CA 2382961	AA	20010308	CA 2000-2382961	20000814
EP 1214400	A2	20020619	EP 2000-955526	20000814
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
JP 2003508045	T2	20030304	JP 2001-520837	20000814
PRIORITY APPLN. INFO.:			US 1999-386642	A 19990831
			US 1999-303162	A2 19990430
			WO 2000-US22283	W 20000814

AB DNA sequences are provided encoding an expression vector system that will permit, through limited proteolysis, the activation of expressed zymogen precursor of (S1) **serine proteases** in a highly controlled and reproducible fashion. Nucleic acids encoding pre sequences derived of prolactin and trypsinogen, and pro sequences derived from the EK cleavage site of **human** trypsinogen I or blood-coagulation factor Xa, are provided. The processed expressed protein, once activated, is rendered in a form amenable to measuring the catalytic activity. This catalytic activity of the activated form, is often a more accurate representation of the mature S1 protease gene product relative to the unprocessed zymogen precursor. Thus, this series of zymogen activation constructs represents a significant system for the anal. and characterization of **serine protease** gene products. Proteases prostasin, O, neuropsin, F, and MH2 are prepared which may be used in pharmaceutical compns., for the identification of physiol. substrates and specific modulators, for laundry detergents, and in skin care products.

L10 ANSWER 16 OF 25 MEDLINE on STN DUPLICATE 9
ACCESSION NUMBER: 2002052778 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11602603
TITLE: **Human** tryptase epsilon (PRSS22), a new member of the chromosome 16p13.3 family of **human serine proteases** expressed in airway epithelial cells.
AUTHOR: Wong G W; Yasuda S; Madhusudhan M S; Li L; Yang Y; Krilis S A; Sali A; Stevens R L
CORPORATE SOURCE: Department of Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, Massachusetts 02115, USA.
CONTRACT NUMBER: AI-23483 (NIAID)
GM-54762 (NIGMS)
HL-36110 (NHLBI)
HL-63284 (NHLBI)
SOURCE: Journal of biological chemistry, (2001 Dec 28) 276 (52) 49169-82. Electronic Publication: 2001-10-15.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF321182
ENTRY MONTH: 200201
ENTRY DATE: Entered STN: 20020125
Last Updated on STN: 20030105
Entered Medline: 20020131

AB Probing of the GenBank expressed sequence tag (EST) data base with varied **human** trypsin cDNAs identified two truncated ESTs that subsequently were found to encode overlapping portions of a novel **human serine protease** (designated trypsin epsilon or **protease, serine** S1 family member 22 (PRSS22)). The trypsin epsilon gene resides on chromosome 16p13.3 within a 2.5-Mb complex of **serine protease** genes. Although at least 7 of the 14 genes in this complex encode enzymatically active proteases, only one trypsin epsilon-like gene was identified. The trachea and esophagus were found to contain the highest steady-state levels of the trypsin epsilon transcript in adult **humans**. Although the trypsin epsilon transcript was scarce in adult **human** lung, it was present in abundance in fetal lung. Thus, the trypsin epsilon gene is expressed in the airways in a developmentally regulated manner that is different from that of other **human** trypsin genes. At the cellular level, trypsin epsilon is a major product of normal pulmonary epithelial cells, as well as varied transformed epithelial cell lines. Enzymatically active trypsin epsilon is also constitutively secreted from these cells. The amino acid sequence of **human** trypsin epsilon is 38-44% identical to those of **human** trypsin alpha, trypsin beta I, trypsin beta II, trypsin beta III, transmembrane trypsin/trypsin gamma, marapsin, and Esp-1/**testisin**. Nevertheless, comparative protein structure modeling and functional studies using recombinant material revealed that trypsin epsilon has a substrate preference distinct from that of its other family members. These data indicate that the products of the chromosome 16p13.3 complex of trypsin genes evolved to carry out varied functions in **humans**.

L10 ANSWER 17 OF 25 MEDLINE on STN DUPLICATE 10
ACCESSION NUMBER: 2001247166 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11231276
TITLE: Organization and chromosomal localization of the murine **Testisin** gene encoding a **serine protease** temporally expressed during spermatogenesis.
AUTHOR: Scarman A L; Hooper J D; BoucAUT K J; Sit M L; Webb G C; Normyle J F; AntalIs T M
CORPORATE SOURCE: The Queensland Institute of Medical Research and the Experimental Oncology Program, University of Queensland, Brisbane, Australia.
SOURCE: European journal of biochemistry / FEBS, (2001 Mar) 268 (5) 1250-8.
Journal code: 0107600. ISSN: 0014-2956.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF304012; GENBANK-AY005145
ENTRY MONTH: 200105
ENTRY DATE: Entered STN: 20010517
Last Updated on STN: 20010517
Entered Medline: 20010510

AB The recently characterized **human serine protease, Testisin**, is expressed on premeiotic testicular germ cells and is a candidate type II tumor suppressor for

testicular cancer. Here we report the cloning, characterization and expression of the gene encoding mouse **Testisin**, Prss21. The murine **Testisin** gene comprises six exons and five introns and spans approximately 5 kb of genomic DNA with an almost identical structure to the **human Testisin** gene, PRSS21. The gene was localized to murine chromosome 17 A3.3-B; a region syntenic with the location of PRSS21 on **human** chromosome 16p13.3. Northern blot analyses of RNA from a range of adult murine tissues demonstrated a 1.3 kb mRNA transcript present only in testis. The murine **Testisin** cDNA shares 65% identity with **human Testisin** cDNA and encodes a putative pre-pro-protein of 324 amino acids with 80% similarity to **human Testisin**. The predicted amino-acid sequence includes an N-terminal signal sequence of 27 amino acids, a 27 amino-acid pro-region, a 251 amino-acid catalytic domain typical of a **serine protease** with trypsin-like specificity, and a C-terminal hydrophobic extension which is predicted to function as a membrane anchor. Immunostaining for murine **Testisin** in mouse testis demonstrated specific staining in the cytoplasm and on the plasma membrane of round and elongating spermatids. Examination of murine **Testisin** mRNA expression in developing sperm confirmed that the onset of murine **Testisin** mRNA expression occurred at approximately day 18 after birth, corresponding to the appearance of spermatids in the testis, in contrast to the expression of **human Testisin** in spermatocytes. These data identify the murine ortholog to **human Testisin** and demonstrate that the murine **Testisin** gene is temporally regulated during murine spermatogenesis.

L10 ANSWER 18 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:1194 BIOSIS
DOCUMENT NUMBER: PREV200200001194
TITLE: The **serine protease testisin** functions as a tumor and/or growth suppressor in testicular tumorigenesis.
AUTHOR(S): Boucaut, Kerry Jane [Reprint author]; Douglas, Meaghan L.; Nicol, David L.; Pera, Martin F.; Clements, Judith A.; Antalis, Toni M.
CORPORATE SOURCE: CMB, Queensland University of Technology, Brisbane, QLD, Australia
kerryB@qimr.edu.au
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2001) Vol. 42, pp. 712. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer Research. New Orleans, LA, USA. March 24-28, 2001.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 28 Dec 2001
Last Updated on STN: 25 Feb 2002

L10 ANSWER 19 OF 25 MEDLINE on STN DUPLICATE 11

ACCESSION NUMBER: 2001121218 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11111072
TITLE: Overexpression of **testisin**, a **serine protease** expressed by testicular germ cells, in epithelial ovarian tumor cells.
AUTHOR: Shigemasa K; Underwood L J; Beard J; Tanimoto H; Ohama K; Parmley T H; O'Brien T J
CORPORATE SOURCE: Department of Obstetrics and Gynecology, Hiroshima University School of Medicine, Hiroshima, Japan..
kaz@mcai.med.hiroshima-u.ac.jp

SOURCE: Journal of the Society for Gynecologic Investigation, (2000 Nov-Dec) 7 (6) 358-62.
Journal code: 9433806. ISSN: 1071-5576.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200102
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010215

AB OBJECTIVE: In a continued effort to identify and characterize secreted proteases that are overexpressed in ovarian carcinomas, we discovered the **testisin** protease as such a candidate. When this discovery was originally made, no data existed in the literature or in the GenBank database that identified such a gene. Our main objective was to determine whether this gene was overexpressed exclusively in ovarian tumor tissues compared with normal ovary and whether it was expressed in any other normal tissues. METHODS: mRNA was isolated and cDNA was prepared from 34 ovarian tumors (four adenomas, three low malignant potential tumors, and 27 carcinomas) and seven normal ovaries. The **testisin** mRNA expression level relative to internal control, beta-tubulin, was determined by Northern blot analysis and semiquantitative polymerase chain reaction (PCR). RESULTS: Northern blot hybridization showed that the **testisin** transcript was abundant in ovarian carcinoma but was not detected in normal ovary. On examination of Northern blots from normal fetal and adult tissues, only adult testis showed abundant transcripts of **testisin**. Semiquantitative PCR examination showed that the **testisin** mRNA levels in ovarian tumors of low malignant potential and in ovarian carcinomas were significantly higher than in normal ovaries ($P < .01$). **Testisin** mRNA level in ovarian carcinomas was also significantly higher than in ovarian adenomas ($P < .05$). **Testisin** overexpression rates in advanced stage (stage 2 or 3) diseases were significantly higher than that in early stage diseases (stage 1) in ovarian carcinoma samples ($P < .05$). CONCLUSIONS: The induction of the **testisin** transcript might contribute to the development, progression, and invasive or metastatic capacity of ovarian carcinomas.

L10 ANSWER 20 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:238467 BIOSIS
DOCUMENT NUMBER: PREV200000238467
TITLE: Localization, structure and regulation of the **human PRSS14** gene encoding the **serine proteinase testisin**.
AUTHOR(S): Antal, Toni M. [Reprint author]; BoucAUT, Kerry B. [Reprint author]; Normyle, John F. [Reprint author]; Fitzpatrick, Dave R. [Reprint author]; Hooper, John D. [Reprint author]
CORPORATE SOURCE: Queensland Institute of Med Res, Brisbane, QLD, Australia
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2000) No. 41, pp. 348. print.
Meeting Info.: 91st Annual Meeting of the American Association for Cancer Research. San Francisco, California, USA. April 01-05, 2000.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Jun 2000
Last Updated on STN: 5 Jan 2002

ACCESSION NUMBER: 2000451880 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 11004480
 TITLE: Localization, expression and genomic structure of the gene encoding the **human serine protease testisin**.
 AUTHOR: Hooper J D; Bowen N; Marshall H; Cullen L M; Sood R; Daniels R; Stuttgen M A; Normyle J F; Higgs D R; Kastner D L; Ogbourne S M; Pera M F; Jazwinska E C; Antalis T M
 CORPORATE SOURCE: Cellular Oncology Laboratory, The Queensland Institute of Medical Research, Brisbane, Queensland 4029, Australia.
 SOURCE: Biochimica et biophysica acta, (2000 Jun 21) 1492 (1) 63-71.
 Journal code: 0217513. ISSN: 0006-3002.
 PUB. COUNTRY: Netherlands
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 OTHER SOURCE: GENBANK-AF058301
 ENTRY MONTH: 200010
 ENTRY DATE: Entered STN: 20010322
 Last Updated on STN: 20010322
 Entered Medline: 20001031

AB **Testisin** is a recently identified **human serine protease** expressed by premeiotic testicular germ cells and is a candidate tumor suppressor for testicular cancer. Here, we report the characterization of the gene encoding **testisin**, designated PRSS21, and its localization on the short arm of **human** chromosome 16 (16p13.3) between the microsatellite marker D16S246 and the radiation hybrid breakpoint CY23HA. We have further refined the localization to cosmid 406D6 in this interval and have established that the gene is approximately 4.5 kb in length, and contains six exons and five intervening introns. The structure of PRSS21 is very similar to the **human** prostaticin gene (PRSS8) which maps nearby on 16p11.2, suggesting that these genes may have evolved through gene duplication. Sequence analysis showed that the two known isoforms of **testisin** are generated by alternative pre-mRNA splicing. A major transcription initiation site was identified 97 nucleotides upstream of the **testisin** translation start and conforms to a consensus initiator element. The region surrounding the transcription initiation site lacks a TATA consensus sequence, but contains a CCAAT sequence and includes a CpG island. The 5'-flanking region contains several consensus response elements including Sp1, AP1 and several testis-specific elements. Analysis of **testisin** gene expression in tumor cell lines shows that **testisin** is not expressed in testicular tumor cells but is aberrantly expressed in some tumor cell lines of non-testis origin. These data provide the basis for identifying potential genetic alterations of PRSS21 that may underlie both testicular abnormalities and tumorigenesis.

L10 ANSWER 22 OF 25 MEDLINE on STN DUPLICATE 13
 ACCESSION NUMBER: 1999323395 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 10397266
 TITLE: **Testisin**, a new **human serine proteinase** expressed by premeiotic testicular germ cells and lost in testicular germ cell tumors.
 AUTHOR: Hooper J D; Nicol D L; Dickinson J L; Eyre H J; Scarman A L; Normyle J F; Stuttgen M A; Douglas M L; Loveland K A; Sutherland G R; Antalis T M
 CORPORATE SOURCE: Cellular Oncology Laboratory, University of Queensland Joint Oncology Program and Queensland Institute of Medical Research, Brisbane, Australia.
 SOURCE: Cancer research, (1999 Jul 1) 59 (13) 3199-205.
 Journal code: 2984705R. ISSN: 0008-5472.
 PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199907
ENTRY DATE: Entered STN: 19990806
Last Updated on STN: 20000303
Entered Medline: 19990728

AB We have cloned and characterized a cDNA encoding a new **human serine proteinase, testisin**, that is abundantly expressed only in the testis and is lost in testicular tumors. The **testisin** cDNA was identified by homology cloning using degenerate primers directed at conserved sequence motifs within the catalytic regions of **serine proteinases**. It is 1073 nucleotides long, including 942 nucleotides of open reading frame and a 113-nucleotide 3' untranslated sequence. Northern and dot blot analyses of RNA from a range of normal **human** tissues revealed a 1.4-kb mRNA species that was present only in testis, which was not detected in eight of eight testicular tumors. **Testisin** cDNA is predicted to encode a protein of 314 amino acids, which consists of a 19-amino acid (aa) signal peptide, a 22-aa proregion, and a 273-aa catalytic domain, including a unique 17-aa COOH-terminal hydrophobic extension that is predicted to function as a membrane anchor. The deduced amino acid sequence of **testisin** shows 44% identity to prostasin and contains features that are typical of **serine proteinases** with trypsin-like substrate specificity. Antipeptide antibodies directed against the **testisin** polypeptide detected an immunoreactive **testisin** protein of Mr 35,000-39,000 in cell lysates from COS-7 cells that were transiently transfected with **testisin** cDNA. Immunostaining of normal testicular tissue showed that **testisin** was expressed in the cytoplasm and on the plasma membrane of premeiotic germ cells. No staining was detected in eight of eight germ cell-derived testicular tumors. In addition, the **testisin** gene was localized by fluorescence in situ hybridization to the short arm of **human** chromosome 16 (16p13.3), a region that has been associated with allelic imbalance and loss of heterozygosity in sporadic testicular tumors. These findings demonstrate a new cell surface **serine proteinase**, loss of which may have a direct or indirect role in the progression of testicular tumors of germ cell origin.

L10 ANSWER 23 OF 25 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:533096 SCISEARCH

THE GENUINE ARTICLE: 211CA

TITLE: **Testisin**, a new **human serine proteinase** expressed by premeiotic testicular germ cells.

AUTHOR: Scarman A L (Reprint); Hooper J D; Normyle J F; Nicol D; Antalis T M

CORPORATE SOURCE: QUEENSLAND INST MED RES, CELLULAR ONCOL LAB, BRISBANE, QLD 4006, AUSTRALIA; UNIV QUEENSLAND, BRISBANE, QLD, AUSTRALIA; PRINCESS ALEXANDRA HOSP, WOOLLOONGABBA, QLD 4102, AUSTRALIA

COUNTRY OF AUTHOR: AUSTRALIA

SOURCE: BIOLOGY OF REPRODUCTION, (JUL 1999) Vol. 60, Supp. [1], pp. 528-528.
Publisher: SOC STUDY REPRODUCTION, 1603 MONROE ST, MADISON, WI 53711-2021.
ISSN: 0006-3363.

DOCUMENT TYPE: Conference; Journal

FILE SEGMENT: LIFE

LANGUAGE: English

REFERENCE COUNT: 0

L10 ANSWER 24 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:405519 BIOSIS
DOCUMENT NUMBER: PREV199900405519
TITLE: **Testisin**, a new **human serine proteinase** expressed by premeiotic testicular germ cells.
AUTHOR(S): Scarman, A. L. [Reprint author]; Hooper, J. D. [Reprint author]; Normyle, J. F. [Reprint author]; Nicol, D.; Antalis, T. M. [Reprint author]
CORPORATE SOURCE: Cellular Oncology Laboratory, Queensland Institute of Medical Research, Brisbane, QLD, Australia
SOURCE: Biology of Reproduction, (1999) Vol. 60, No. SUPPL. 1, pp. 257. print.
Meeting Info.: Thirty-Second Annual Meeting of the Society for the Study of Reproduction. Pullman, Washington, USA. July 31-August 3, 1999. Society for the Study of Reproduction.
CODEN: BIREBV. ISSN: 0006-3363.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Oct 1999
Last Updated on STN: 8 Oct 1999

L10 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:568908 HCAPLUS
DOCUMENT NUMBER: 129:198890
TITLE: Cloning of **human serine proteinases** and a kinase involved in spermatogenesis and the suppression of testicular cancer
INVENTOR(S): Antalis, Toni Marie; Hooper, John David
PATENT ASSIGNEE(S): Amrad Operations Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 168 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9836054	A1	19980820	WO 1998-AU85	19980213
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9859734	A1	19980908	AU 1998-59734	19980213
US 6479274	B1	20021112	US 1998-23942	19980213
AU 774591	B2	20040701	AU 2000-72539	20001228
US 2003092154	A1	20030515	US 2002-40647	20020107
PRIORITY APPLN. INFO.:			AU 1997-5101	A 19970213
			AU 1997-422	A 19971118
			AU 1998-59734	A3 19980213
			US 1998-23942	A3 19980213
			WO 1998-AU85	W 19980213

AB The present invention relates novel proteinaceous mols. involved in or associated with regulation of cell activities and/or viability. The present

invention is particularly directed to novel **serine proteinases** and a novel kinase and to derivs., agonists and antagonists thereof. PCR cloning isolated a **human** cDNA encoding a novel **serine proteinase**, referred to herein as HELA2 or **testisin**, which has roles in spermatogenesis, in suppressing testicular cancer, and as a marker for cancers. **Testisin** is specifically expressed in the normal testis and is associated with sperm development; it is associated with tumors in non-testis cell types and **testisin** mRNA and protein expression is absent in testicular germ cell tumors. The **testisin** gene was mapped to **human** chromosome 16p13.3, and is organized into 6 exons and 5 introns. Two forms of **testisin** are provided, based on alternative splicing. The **testisin** gene is associated with a gene cluster of homologous genes, designated SP001LA, SP002LA, and SP003LA. An addnl. **serine proteinase**, designated ATC2, and a kinase designated BCON3 were also provided by PCR cloning with the same primers.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 15:50:53 ON 15 MAR 2005)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:51:18 ON 15 MAR 2005

```
L1      590888 S PROTEINASE? OR PROTEASE?
L2      372973 S SERINE
L3      83547 S L1(A)L2
L4      35890 S HUMAN AND L3
L5      9 S "HELA2"
L6      312121 S ISOFORM?
L7      6 DUP REM L5 (3 DUPLICATES REMOVED)
L8      76 S TESTISIN
L9      63 S L4 AND L8
L10     25 DUP REM L9 (38 DUPLICATES REMOVED)
```

=> s "l" or "s"

<-----User Break----->

SEARCH ENDED BY USER

=> s 14 and "l"

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L11     3249 L4 AND "L"
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=> s 16 and l11

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L12     74 L6 AND L11
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=> dup rem l12

PROCESSING COMPLETED FOR L12

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L13     49 DUP REM L12 (25 DUPLICATES REMOVED)
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=> d 1-49 ibib

L13 ANSWER 1 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:34707 HCAPLUS

DOCUMENT NUMBER: 142:128580

TITLE: Prognosis determination in Ewing sarcoma patients by genetic profiling

INVENTOR(S): Avigad, Smadar; Yaniv, Isaac; Zaizov, Rina; Ohali, Anat

PATENT ASSIGNEE(S): Mor Research Applications Ltd., Israel

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005002414	A2	20050113	WO 2004-IL578	20040630
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			US 2003-483626P	P 20030701

L13 ANSWER 2 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:101983 HCAPLUS

Correction of: 2005:14607

DOCUMENT NUMBER: 142:171158

Correction of: 142:87734

TITLE: Gene expression that correlated with breast cancer recurrence and patient survival, and diagnostic and therapeutic uses thereof

INVENTOR(S): Erlander, Mark G.; Ma, Xiao-Jun; Wang, Wei; Wittliff, James L.

PATENT ASSIGNEE(S): Arcturus Bioscience, Inc., USA

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005001138	A2	20050106	WO 2004-US19451	20040618
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			US 2003-479963P	P 20030618
			US 2004-545810P	P 20040218

L13 ANSWER 3 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:14535 HCAPLUS

DOCUMENT NUMBER: 142:111832

TITLE: **Human serine proteinase inhibitor, clade E, member 2 (SERPINE2) gene expression as prognostic marker in colorectal cancer**

INVENTOR(S): Rowe, Michael W.; Moler, Edward J.; Randazzo, Filippo
 PATENT ASSIGNEE(S): Chiron Corporation, USA
 SOURCE: PCT Int. Appl., 89 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2005001046	A2	20050106	WO 2004-US17408	20040603
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			US 2003-475872P	P 20030603

L13 ANSWER 4 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:122685 HCAPLUS
 DOCUMENT NUMBER: 142:213341
 TITLE: Expression profiling of prognostic markers for
 prostate cancer relapse to predict disease outcome
 INVENTOR(S): Afar, Daniel E. H.; Henshall, Susan M.; Hiller, Jordan
 B.; Mack, David H.; Sutherland, Robert L.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 27 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2005032065	A1	20050210	US 2003-603505	20030624
PRIORITY APPLN. INFO.:			US 2002-391309P	P 20020624

L13 ANSWER 5 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:78080 HCAPLUS
 DOCUMENT NUMBER: 142:150833
 TITLE: Protein and cDNA sequences of **human
 serine protease PRSS11-L**
 (PRSS11-like), which is a splice variant of HtrA3, and
 therapeutic uses thereof
 INVENTOR(S): Darrow, Andrew Lawrence; Qi, Jian-Shen; Chen, Cailin;
 Andrade-Gordon, Patricia
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of U.S.
 Ser. No. 189,099, abandoned.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2005019777	A1	20050127	US 2003-617443	20030702
US 2004005659	A1	20040108	US 2002-189099	20020703
PRIORITY APPLN. INFO.:			US 2002-189099	B2 20020703

L13 ANSWER 6 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
 ACCESSION NUMBER: 2005:156681 HCAPLUS
 Correction of: 2005:60757
 DOCUMENT NUMBER: 142:216629
 Correction of: 142:132329
 TITLE: Gene expression profiles and biomarkers for the
 detection of hyperlipidemia and other disease-related
 gene transcripts in blood
 INVENTOR(S): Liew, Choong-Chin
 PATENT ASSIGNEE(S): Chondrogene Limited, Can.
 SOURCE: U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S.
 Ser. No. 802,875.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 39
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2004248170	A1	20041209	US 2004-812777	20040330
US 2004014059	A1	20040122	US 2002-268730	20021009
US 2004248169	A1	20041209	US 2004-812737	20040330
US 2004248170	A1	20041209	US 2004-812777	20040330
US 2004248170	A1	20041209	US 2004-812777	20040330
US 2004265869	A1	20041230	US 2004-812716	20040330
WO 2004112589	A2	20041229	WO 2004-US20836	20040621
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,				
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,				
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,				
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,				
SN, TD, TG				
PRIORITY APPLN. INFO.:			US 1999-115125P	P 19990106
			US 2000-477148	B1 20000104
			US 2002-268730	A2 20021009
			US 2003-601518	A2 20030620
			US 2004-802875	A2 20040312
			US 2001-271955P	P 20010228
			US 2001-275017P	P 20010312
			US 2001-305340P	P 20010713
			US 2002-85783	A2 20020228
			US 2004-809675	A 20040325
			US 2004-812777	A 20040330

L13 ANSWER 7 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
 ACCESSION NUMBER: 2005:139371 HCAPLUS
 DOCUMENT NUMBER: 142:195820
 TITLE: Gene expression profiles and biomarkers for the
 detection of Chagas disease and other disease-related
 gene transcripts in blood
 INVENTOR(S): Liew, Choong-Chin

PATENT ASSIGNEE(S): Chondrogene Limited, Can.
 SOURCE: U.S. Pat. Appl. Publ., 154 pp., Cont.-in-part of U.S. Ser. No. 802,875.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 39
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004241729	A1	20041202	US 2004-813097	20040330
US 2004014059	A1	20040122	US 2002-268730	20021009
US 2004241729	A1	20041202	US 2004-813097	20040330
US 2004248169	A1	20041209	US 2004-812737	20040330
WO 2004112589	A2	20041229	WO 2004-US20836	20040621
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:
 US 1999-115125P P 19990106
 US 2000-477148 B1 20000104
 US 2002-268730 A2 20021009
 US 2003-601518 A2 20030620
 US 2004-802875 A2 20040312
 US 2004-813097 A 20040330
 US 2001-271955P P 20010228
 US 2001-275017P P 20010312
 US 2001-305340P P 20010713
 US 2002-85783 A2 20020228
 US 2004-809675 A 20040325

L13 ANSWER 8 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:824003 HCAPLUS
 DOCUMENT NUMBER: 141:312240
 TITLE: Differentially regulated nuclear genes encoding mitochondrial proteins in bipolar disorder and their use as markers in diagnosis, monitoring, and therapy
 INVENTOR(S): Konradi, Christine; Heckers, Stephan
 PATENT ASSIGNEE(S): The McLean Hospital Corporation, USA
 SOURCE: PCT Int. Appl., 101 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004085614	A2	20041007	WO 2004-US8516	20040319
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG

US 2004248286 A1 20041209 US 2004-804950 20040319
PRIORITY APPLN. INFO.: US 2003-456873P P 20030321
US 2003-516527P P 20031030

L13 ANSWER 9 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:371153 HCAPLUS

DOCUMENT NUMBER: 140:371494

TITLE: Binary prediction tree modeling with many predictors
and its uses in clinical and genomic applications

INVENTOR(S): Nevins, Joseph R.; West, Mike; Huang, Andrew T.

PATENT ASSIGNEE(S): Duke University, USA

SOURCE: PCT Int. Appl., 886 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004038376	A2	20040506	WO 2003-US33946	20031024
WO 2004038376	A3	20040826		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2004038376	A2	20040506	WO 2003-XA33946	20031024
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2004038376	A2	20040506	WO 2003-XB33946	20031024
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2002-420729P P 20021024
US 2002-421062P P 20021025

US 2002-421102P	P	20021025
US 2002-424701P	P	20021108
US 2002-424715P	P	20021108
US 2002-424718P	P	20021108
US 2002-425256P	P	20021112
US 2003-448461P	P	20030221
US 2003-448462P	P	20030221
US 2003-457877P	P	20030327
US 2003-458373P	P	20030331
WO 2003-US33946	A	20031024

L13 ANSWER 10 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:371064 HCAPLUS

DOCUMENT NUMBER: 140:373461

TITLE: Evaluation of breast cancer states and outcomes using gene expression profiles

INVENTOR(S): West, Mike; Nevins, Joseph R.; Huang, Andrew

PATENT ASSIGNEE(S): Synpac, Inc., USA; Duke Univerisity

SOURCE: PCT Int. Appl., 799 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004037996	A2	20040506	WO 2003-US33656	20031024
WO 2004037996	A3	20041229		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2004083084	A1	20040429	US 2002-291878	20021112
WO 2004044839	A2	20040527	WO 2002-US38216	20021112
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2004106113	A1	20040603	US 2002-291886	20021112
PRIORITY APPLN. INFO.:			US 2002-420729P	P 20021024
			US 2002-421062P	P 20021025
			US 2002-421102P	P 20021025
			US 2002-424701P	P 20021108
			US 2002-424715P	P 20021108
			US 2002-424718P	P 20021108
			US 2002-291878	A 20021112
			US 2002-291886	A 20021112
			US 2002-425256P	P 20021112
			WO 2002-US38216	A 20021112
			WO 2002-US38222	A 20021112

US 2003-448461P	P	20030221
US 2003-448462P	P	20030221
US 2003-457877P	P	20030327
US 2003-458373P	P	20030331

L13 ANSWER 11 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:355085 HCAPLUS
 DOCUMENT NUMBER: 140:369944
 TITLE: **Human** tissue-specific housekeeping genes identified by expression profiling
 INVENTOR(S): Aburatani, Hiroyuki; Yamamoto, Shogo
 PATENT ASSIGNEE(S): NGK Insulators, Ltd., Japan
 SOURCE: PCT Int. Appl., 372 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004035785	A1	20040429	WO 2002-JP10753	20021016
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2004229233	A1	20041118	US 2003-684422	20031015
PRIORITY APPLN. INFO.:			US 2002-418614P	P 20021016
			WO 2002-JP10753	W 20021016
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L13 ANSWER 12 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:308529 HCAPLUS
 DOCUMENT NUMBER: 140:333599
 TITLE: Gene expression profile of **human** and mouse genes in atopic dermatitis and psoriasis patients and its use for diagnosis, therapy, and drug screening
 INVENTOR(S): Itoh, Mikito; Ogawa, Kaoru; Shinagawa, Akira; Sudo, Hajime; Ogawa, Hideoki; Ra, Chisei; Mitsuishi, Kouichi
 PATENT ASSIGNEE(S): Genox Research, Inc., Japan; Juntendo University
 SOURCE: PCT Int. Appl., 611 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004031386	A1	20040415	WO 2003-JP9808	20030801
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2002-229318 A 20020806
JP 2003-136543 A 20030514

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:252542 HCAPLUS
DOCUMENT NUMBER: 140:269544
TITLE: Monoclonal antibodies and immunoassays for specific determination of squamous cell cancer antigen (SCCA) **isoforms**
INVENTOR(S): Roejer, Eva; Olle, Nilsson
PATENT ASSIGNEE(S): Canag Diagnostics Ab, Swed.
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004024767	A1	20040325	WO 2003-SE1332	20030827
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
SE 2002002702	A	20040510	SE 2002-2702	20020910
US 2004176577	A1	20040909	US 2003-652705	20030829
PRIORITY APPLN. INFO.: SE 2002-2702 A 20020910 US 2002-409484P P 20020910				
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L13 ANSWER 14 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:1997 HCAPLUS
DOCUMENT NUMBER: 142:111841
TITLE: Gene expression profiles and biomarkers for the detection of depression-related and other disease-related gene transcripts in blood
INVENTOR(S): Liew, Choong-Chin
PATENT ASSIGNEE(S): Chondrogene Limited, Can.
SOURCE: U.S. Pat. Appl. Publ., 154 pp., Cont.-in-part of U.S. Ser. No. 802,875.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 39
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004265868	A1	20041230	US 2004-812702	20040330

US 2004014059	A1	20040122	US 2002-268730	20021009
US 2004248169	A1	20041209	US 2004-812737	20040330
US 2004265869	A1	20041230	US 2004-812716	20040330
US 2004265868	A1	20041230	US 2004-812702	20040330
US 2004265868	A1	20041230	US 2004-812702	20040330
WO 2004112589	A2	20041229	WO 2004-US20836	20040621

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 1999-115125P	P	19990106
US 2000-477148	B1	20000104
US 2002-268730	A2	20021009
US 2003-601518	A2	20030620
US 2004-802875	A2	20040312
US 2001-271955P	P	20010228
US 2001-275017P	P	20010312
US 2001-305340P	P	20010713
US 2002-85783	A2	20020228
US 2004-809675	A	20040325
US 2004-812702	A	20040330

L13 ANSWER 15 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:60754 HCAPLUS
Correction of: 2004:1036571

ACCESSION NUMBER: 142:16836

TITLE: Sequences of **human** schizophrenia related genes and use for diagnosis, prognosis and therapy

INVENTOR(S): Liew, Choong-Chin

PATENT ASSIGNEE(S): Chondrogene Limited, Can.

SOURCE: U.S. Pat. Appl. Publ., 156 pp., Cont.-in-part of U.S. Ser. No. 802,875.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 39

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2004241727	A1	20041202	US 2004-812731	20040330
US 2004014059	A1	20040122	US 2002-268730	20021009
US 2004248169	A1	20041209	US 2004-812737	20040330
US 2004265869	A1	20041230	US 2004-812716	20040330
WO 2004112589	A2	20041229	WO 2004-US20836	20040621
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 1999-115125P P 19990106
US 2000-477148 B1 20000104
US 2002-268730 A2 20021009
US 2003-601518 A2 20030620
US 2004-802875 A2 20040312
US 2001-271955P P 20010228
US 2001-275017P P 20010312
US 2001-305340P P 20010713
US 2002-85783 A2 20020228
US 2004-809675 A 20040325

L13 ANSWER 16 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:85983 HCAPLUS

DOCUMENT NUMBER: 140:194431

TITLE: **Human** prostate cancer marker genes associated with various metastatic stages identified by gene profiling, and related compositions, kits, and methods for diagnosis, prognosis and therapy

INVENTOR(S): Schlegel, Robert; Endege, Wilson O.

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 131 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2004009481	A1	20040115	US 2002-166883	20020611
US 2004009481	A1	20040115	US 2002-166883	20020611
PRIORITY APPLN. INFO.:			US 2001-297285P	P 20010611
			US 2002-166883	A 20020611

L13 ANSWER 17 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2004431307 MEDLINE

DOCUMENT NUMBER: PubMed ID: 15337831

TITLE: Differential increases in syntheses of newly identified trypsinogen 2 **isoforms** by dietary protein in rat pancreas.

AUTHOR: Hara Hiroshi; Shiota Hiromichi

CORPORATE SOURCE: Division of Applied Bioscience, Graduate School of Agriculture, Hokkaido University, Sapporo 060-8589, Japan.. hara@chem.agr.hokudai.ac.jp

SOURCE: Experimental biology and medicine (Maywood, N.J.), (2004 Sep) 229 (8) 772-80.
Journal code: 100973463. ISSN: 1535-3702.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200410

ENTRY DATE: Entered STN: 20040901

Last Updated on STN: 20041007

Entered Medline: 20041006

L13 ANSWER 18 OF 49 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:62454 SCISEARCH

THE GENUINE ARTICLE: 883ET

TITLE: Disruption of the murine alpha 1-antitrypsin/PI2 gene

AUTHOR: Kushi A (Reprint); Akiyama K; Noguchi M; Edamura K; Yoshida T; Sasai H

CORPORATE SOURCE: Japan Tobacco Inc, Cent Pharmaceut Res Inst, Pharmaceut Frontier Res Lab, Kanazawa Ku, 1-13-2 Fukuura, Yokohama, Kanagawa 2360004, Japan (Reprint); Japan Tobacco Inc, Cent Pharmaceut Res Inst, Pharmaceut Frontier Res Lab, Kanazawa Ku, Yokohama, Kanagawa 2360004, Japan; Japan Tobacco Inc, Cent Pharmaceut Res Inst, Takatsuki, Osaka 5691125, Japan

COUNTRY OF AUTHOR: Japan

SOURCE: EXPERIMENTAL ANIMALS, (OCT 2004) Vol. 53, No. 5, pp. 437-443.
 Publisher: INT PRESS EDITING CENTRE INC, 1-2-3 SUGAMO, TOSHIMA-KU, TOKYO, 170 0002, JAPAN.
 ISSN: 1341-1357.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 21

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L13 ANSWER 19 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:942767 HCAPLUS

DOCUMENT NUMBER: 140:40262

TITLE: Genes expressed in atherosclerotic tissue and their use in diagnosis and pharmacogenetics

INVENTOR(S): Nevins, Joseph; West, Mike; Goldschmidt, Pascal

PATENT ASSIGNEE(S): Duke University, USA

SOURCE: PCT Int. Appl., 408 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003091391	A2	20031106	WO 2002-XB38221	20021112
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2003091391	A2	20031106	WO 2002-US38221	20021112
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			US 2002-374547P	P 20020423
			US 2002-420784P	P 20021024
			US 2002-421043P	P 20021025
			US 2002-424680P	P 20021108
			WO 2002-US38221	A 20021112

L13 ANSWER 20 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:875074 HCAPLUS

DOCUMENT NUMBER: 139:380024

TITLE: Oligonucleotide probes and primers for diagnosing and monitoring autoimmune and chronic inflammatory diseases

INVENTOR(S): Wohlgemuth, Jay; Fry, Kirk; Woodward, Robert; Ly, Ngoc

PATENT ASSIGNEE(S): Expression Diagnostics, Inc., USA

SOURCE: PCT Int. Appl., 877 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003090694	A2	20031106	WO 2003-US13015	20030424
WO 2003090694	A3	20041118		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2004009479	A1	20040115	US 2002-131827	20020424
PRIORITY APPLN. INFO.:			US 2002-131827	A2 20020424
			US 2001-296764P	P 20010608
			US 2001-6290	A2 20011022

L13 ANSWER 21 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:837370 HCAPLUS

DOCUMENT NUMBER: 139:333972

TITLE: Gene profiling methods of diagnosing potential for metastasis or developing hepatocellular carcinoma and of identifying therapeutic targets

INVENTOR(S): Wang, Xin Wei; Ye, Qing-hai; Kim, Jin Woo

PATENT ASSIGNEE(S): The Government of the United States of America, as Represented by the Secretary of the Department of Health and Human Services, USA

SOURCE: PCT Int. Appl., 141 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003087766	A2	20031023	WO 2003-US10783	20030404
WO 2003087766	A3	20040729		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			US 2002-370895P	P 20020405

L13 ANSWER 22 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:409169 HCAPLUS

DOCUMENT NUMBER: 138:380506

TITLE: Genes that are differentially expressed during erythropoiesis and their diagnostic and therapeutic uses

INVENTOR(S): Brissette, William H.; Neote, Kuldeep S.; Zagouras, Panayiotis; Zenke, Martin; Lemke, Britt; Hacker, Christine

PATENT ASSIGNEE(S): Pfizer Products Inc., USA; Max-Delbrueck-Centrum Fuer Molekulare Medizin

SOURCE: PCT Int. Appl., 285 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003038130	A2	20030508	WO 2002-XA34888	20021031
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2003038130	A2	20030508	WO 2002-US34888	20021031
WO 2003038130	A3	20040212		
WO 2003038130	C1	20040422		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			US 2001-335048P	P 20011031
			US 2001-335183P	P 20011102
			WO 2002-US34888	A 20021031

L13 ANSWER 23 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:97550 HCAPLUS

DOCUMENT NUMBER: 138:164674

TITLE: Molecular markers for hepatocellular carcinoma and their use in diagnosis and therapy

INVENTOR(S): Debuschewitz, Sabine; Jobst, Juergen; Kaiser, Stephan

PATENT ASSIGNEE(S): Germany

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003010336	A2	20030206	WO 2002-EP8305	20020725
WO 2003010336	A3	20041229		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10136273	A1	20030213	DE 2001-10136273	20010725
EP 1507871	A2	20050223	EP 2002-790191	20020725
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
WO 2004011945	A2	20040205	WO 2003-EP8243	20030725
WO 2004011945	A3	20040603		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			DE 2001-10136273	A 20010725
			WO 2002-EP8305	W 20020725

L13 ANSWER 24 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:836498 HCAPLUS

DOCUMENT NUMBER: 139:336483

TITLE: Gene expression profiles for diagnostic and prognostic grading of breast cancer and for drug screening

INVENTOR(S): Erlander, Mark G.; Ma, Xiao-Jun; Sgroi, Dennis C.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S. Ser. No. 28,018.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003198972	A1	20031023	US 2002-211015	20020801
US 2004002067	A1	20040101	US 2001-28018	20011221
US 2003236632	A1	20031225	US 2002-282596	20021028
WO 2003060164	A1	20030724	WO 2002-US41216	20021220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003060470 A2 20030724 WO 2002-US41347 20021220
 WO 2003060470 A3 20031113

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-28018 A2 20011221
 US 2002-211015 A2 20020801
 US 2002-282596 A 20021028

L13 ANSWER 25 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:633171 HCAPLUS
 DOCUMENT NUMBER: 139:160778
 TITLE: Frontal cortex and/or cerebellum differentially
 expressed genes, psychiatric disorder-associated
 genes, and diagnostic and therapeutic uses
 INVENTOR(S): Sklar, Pamela; Petryshen, Tracey; Tsan, Gloria; Lehar,
 Joseph
 PATENT ASSIGNEE(S): Whitehead Institute for Biomedical Research, USA
 SOURCE: U.S. Pat. Appl. Publ., 22 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003152972	A1	20030814	US 2002-292382	20021108
PRIORITY APPLN. INFO.:			US 2001-348028P	P 20011108

L13 ANSWER 26 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:935750 HCAPLUS
 DOCUMENT NUMBER: 140:141533
 TITLE: **Human** Mesotrypsin Is a Unique Digestive
 Protease Specialized for the Degradation of Trypsin
 Inhibitors
 AUTHOR(S): Szmola, Richard; Kukor, Zoltan; Sahin-Toth, Miklos
 CORPORATE SOURCE: Department of Molecular and Cell Biology, Goldman
 School of Dental Medicine, Boston University, Boston,
 MA, 02118, USA
 SOURCE: Journal of Biological Chemistry (2003), 278(49),
 48580-48589
 CODEN: JBCHA3; ISSN: 0021-9258
 PUBLISHER: American Society for Biochemistry and Molecular
 Biology
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 27 OF 49 MEDLINE on STN DUPLICATE 3
 ACCESSION NUMBER: 2003339314 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 12707284

TITLE: Processing of Mgml by the rhomboid-type protease Pcpl is required for maintenance of mitochondrial morphology and of mitochondrial DNA.
 AUTHOR: Herlan Mark; Vogel Frank; Bornhovd Carsten; Neupert Walter; Reichert Andreas S
 CORPORATE SOURCE: Adolf-Butenandt-Institut fur Physiologische Chemie, Ludwig-Maximilians-Universitat Munchen, Butenandtstrasse 5, 81377 Munchen, Germany.
 SOURCE: Journal of biological chemistry, (2003 Jul 25) 278 (30) 27781-8. Electronic Publication: 2003-04-21.
 Journal code: 2985121R. ISSN: 0021-9258.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200308
 ENTRY DATE: Entered STN: 20030722
 Last Updated on STN: 20030827
 Entered Medline: 20030826

L13 ANSWER 28 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:733779 HCAPLUS
 DOCUMENT NUMBER: 139:336137
 TITLE: Identification of Novel Gene Expression Targets for the Ras Association Domain Family 1 (RASSF1A) Tumor Suppressor Gene in Non-Small Cell Lung Cancer and Neuroblastoma
 AUTHOR(S): Agathangelou, Angelo; Bieche, Ivan; Ahmed-Choudhury, Jalal; Nicke, Barbara; Dammann, Reinhard; Baksh, Shairaz; Gao, Boning; Minna, John D.; Downward, Julian; Maher, Eamonn R.; Latif, Farida
 CORPORATE SOURCE: Division of Reproductive and Child Health, Section of Medical and Molecular Genetics, University of Birmingham, Birmingham, B15 2TT, UK
 SOURCE: Cancer Research (2003), 63(17), 5344-5351
 CODEN: CNREA8; ISSN: 0008-5472
 PUBLISHER: American Association for Cancer Research
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:176884 HCAPLUS
 DOCUMENT NUMBER: 138:367082
 TITLE: Genome-wide cDNA microarray analysis of gene-expression profiles involved in ovarian endometriosis
 AUTHOR(S): Arimoto, Takahide; Katagiri, Toyomasa; Oda, Katsutoshi; Tsunoda, Tatsuhiko; Yasugi, Toshiharu; Osuga, Yutaka; Yoshikawa, Hiroyuki; Nishii, Osamu; Yano, Tetsu; Taketani, Yuji; Nakamura, Yusuke
 CORPORATE SOURCE: Laboratory of Molecular Medicine, Human Genome Center, Institute of Medical Science, The University of Tokyo, Minato-ku, Tokyo, 108-8639, Japan
 SOURCE: International Journal of Oncology (2003), 22(3), 551-560
 CODEN: IJONES; ISSN: 1019-6439
 PUBLISHER: International Journal of Oncology
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 30 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:322221 HCAPLUS
 DOCUMENT NUMBER: 138:351894
 TITLE: Difference of apoptosis-associated gene expression
 using DNA microarray analysis in gastric cancer cell
 lines according to p53 status induced by low-dose CDDP
 + 5FU, or TNF α + IFN γ
 AUTHOR(S): Matsui, Koji; Fukui, Takami; Kato, Hiroki; Takahashi,
 Takao; Saji, Shigetoyo
 CORPORATE SOURCE: Dep. Tumor General Surg., Div. Cell. Mol. Biol., Gifu
 Univ. Sch. Med., Gifu, Japan
 SOURCE: Gifu Daigaku Igakubu Kiyo (2003), 51(1), 182-189
 CODEN: GDIKAN; ISSN: 0072-4521
 PUBLISHER: Gifu Daigaku Igakubu
 DOCUMENT TYPE: Journal
 LANGUAGE: English

L13 ANSWER 31 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:937303 HCAPLUS
 DOCUMENT NUMBER: 138:20443
 TITLE: Endocrine disruptor screening using DNA chips of
 endocrine disruptor-responsive genes
 INVENTOR(S): Kondo, Akihiro; Takeda, Takeshi; Mizutani, Shigetoshi;
 Tsujimoto, Yoshimasa; Takashima, Ryokichi; Enoki,
 Yuki; Kato, Ikunoshin
 PATENT ASSIGNEE(S): Takara Bio Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 386 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002355079	A2	20021210	JP 2002-69354	20020313
PRIORITY APPLN. INFO.:			JP 2001-73183	A 20010314
			JP 2001-74993	A 20010315
			JP 2001-102519	A 20010330

L13 ANSWER 32 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:138622 HCAPLUS
 DOCUMENT NUMBER: 136:336986
 TITLE: Expression, Purification, and Kinetic Characterization
 of Full-Length **Human** Fibroblast Activation
 Protein
 AUTHOR(S): Sun, Shaoxian; Albright, Charles F.; Fish, Barbara H.;
 George, Henry J.; Selling, Bernard H.; Hollis, Gregory
 F.; Wynn, Richard
 CORPORATE SOURCE: Applied Biotechnology Department, The DuPont
 Pharmaceuticals Company, Experimental Station,
 Wilmington, DE, 19880-0336, USA
 SOURCE: Protein Expression and Purification (2002), 24(2),
 274-281
 CODEN: PEXPEJ; ISSN: 1046-5928
 PUBLISHER: Academic Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 33 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:320060 HCAPLUS
 DOCUMENT NUMBER: 134:339179
 TITLE: Nucleic acids and proteins associated with cancer as antitumor targets
 INVENTOR(S): Burmer, Glenna C.; Brown, Joseph P.; Pritchard, David
 PATENT ASSIGNEE(S): Lifespan Biosciences, Inc., USA
 SOURCE: PCT Int. Appl., 98 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001030964	A2	20010503	WO 2000-US29126	20001020
WO 2001030964	A3	20010809		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 2001013397	A5	20010508	AU 2001-13397	20001020
PRIORITY APPLN. INFO.:			US 1999-161232P	P 19991022
			US 2000-693783	A 20001019
			WO 2000-US29126	W 20001020

L13 ANSWER 34 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:411495 HCAPLUS
 DOCUMENT NUMBER: 135:179631
 TITLE: Profiling changes in gene expression during differentiation and maturation of monocyte-derived dendritic cells using both oligonucleotide microarrays and proteomics
 AUTHOR(S): Le Naour, Francois; Hohenkirk, Lyndon; Grolleau, Annabelle; Misek, David E.; Lescure, Pascal; Geiger, James D.; Hanash, Samir; Beretta, Laura
 CORPORATE SOURCE: Department of Microbiology and Immunology, University of Michigan, Ann Arbor, MI, 48109-0666, USA
 SOURCE: Journal of Biological Chemistry (2001), 276(21), 17920-17931
 CODEN: JBCHA3; ISSN: 0021-9258
 PUBLISHER: American Society for Biochemistry and Molecular Biology
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 35 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:556856 HCAPLUS
 DOCUMENT NUMBER: 135:286235
 TITLE: Genomic and proteomic analysis of the myeloid differentiation program
 AUTHOR(S): Lian, Zheng; Wang, Le; Yamaga, Shigeru; Bonds, Wesley; Beazer-Barclay, Y.; Kluger, Yuval; Gerstein, Mark; Newburger, Peter E.; Berliner, Nancy; Weissman, Sherman M.
 CORPORATE SOURCE: Department of Genetics, Boyer Center for Molecular

Medicine, the Section of Hematology, Department of
Internal Medicine, Yale University School of Medicine,
New Haven, CT, 06536-0812, USA
SOURCE: Blood (2001), 98(3), 513-524
CODEN: BLOOAW; ISSN: 0006-4971
PUBLISHER: American Society of Hematology
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 36 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:295473 HCAPLUS
DOCUMENT NUMBER: 135:302271
TITLE: Differential distribution of soluble and complexed
forms prostate-specific antigen in cyst fluids of
women with cystic breast disease
AUTHOR(S): Malatesta, Manuela; Mannello, Ferdinando; Sebastiani,
Maurizio; Gazzanelli, Giancarlo
CORPORATE SOURCE: Istituto di Istologia and Analisi di Laboratorio,
Facolta di Scienze Matematiche Fisich, Libera
Universita, Urbino, 61029, Italy
SOURCE: Journal of Clinical Laboratory Analysis (2001), 15(2),
81-86
CODEN: JCANEM; ISSN: 0887-8013
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 37 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:153330 HCAPLUS
DOCUMENT NUMBER: 134:337499
TITLE: Primary structure of potato Kunitz-type **serine
proteinase** inhibitor
AUTHOR(S): Valueva, Tatyana A.; Revina, Tatyana A.; Mosolov,
Vladimir V.; Mentele, Reinhard
CORPORATE SOURCE: Bach Institute of Biochemistry, Russian Academy of
Sciences, Moscow, 171071, Russia
SOURCE: Biological Chemistry (2000), 381(12), 1215-1221
CODEN: BICHF3; ISSN: 1431-6730
PUBLISHER: Walter de Gruyter GmbH & Co. KG
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 38 OF 49 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 2000237446 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10772776
TITLE: Effect of the **serine protease** inhibitor
N-tosyl-L-phenylalanine-chloromethyl ketone
(TPCK) on MCF-7 mammary tumour cells growth and
differentiation.
AUTHOR: Horman S; Del Bino G; Fokan D; Mosselmans R; Galand P
CORPORATE SOURCE: Laboratory of Cytology and Experimental Cancerology, Free
University of Brussels (ULB), Faculty of Medicine, 808
route de Lennik, Brussels, B-1070, Belgium..
pgaland@med.ulb.ac.be
SOURCE: Cell biology international, (2000) 24 (3) 153-61.
Journal code: 9307129. ISSN: 1065-6995.
PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200006
ENTRY DATE: Entered STN: 20000706
Last Updated on STN: 20000706
Entered Medline: 20000626

L13 ANSWER 39 OF 49 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 2000119973 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10653592
TITLE: Co-expression of the squamous cell carcinoma antigens 1 and 2 in normal adult **human** tissues and squamous cell carcinomas.
AUTHOR: Cataltepe S; Gornstein E R; Schick C; Kamachi Y; Chatson K; Fries J; Silverman G A; Upton M P
CORPORATE SOURCE: Division of Newborn Medicine, Children's Hospital, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts 02115-5737, USA.
CONTRACT NUMBER: CA69331 (NCI)
CA73031 (NCI)
HD28475 (NICHD)
SOURCE: journal of histochemistry and cytochemistry : official journal of the Histochemistry Society, (2000 Jan) 48 (1) 113-22.
Journal code: 9815334. ISSN: 0022-1554.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200002
ENTRY DATE: Entered STN: 20000218
Last Updated on STN: 20000218
Entered Medline: 20000210

L13 ANSWER 40 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:504931 HCAPLUS
DOCUMENT NUMBER: 133:359644
TITLE: Localization, expression and genomic structure of the gene encoding the **human serine protease** testisin
AUTHOR(S): Hooper, John D.; Bowen, Natalie; Marshall, Heidi; Cullen, Lara M.; Sood, Raman; Daniels, Rachael; Stuttgen, Melanie A.; Normyle, John F.; Higgs, Douglas R.; Kastner, Daniel L.; Ogbourne, Steven M.; Pera, Martin F.; Jazwinska, Elizabeth C.; Antalis, Toni M.
CORPORATE SOURCE: Cellular Oncology Laboratory, Post Office Royal Brisbane Hospital, The Queensland Institute of Medical Research and the University of Queensland, Brisbane, 4029, Australia
SOURCE: Biochimica et Biophysica Acta (2000), 1492(1), 63-71
CODEN: BBACAQ; ISSN: 0006-3002
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 41 OF 49 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2000:11257 SCISEARCH
THE GENUINE ARTICLE: 267VP
TITLE: Primary structure of a 21-kD protein from potato tubers

AUTHOR: Valueva T A (Reprint); Revina T A; Kladnitskaya G V;
Mosolov V V; Mentele P
CORPORATE SOURCE: RUSSIAN ACAD SCI, BACH INST BIOCHM, LENINSKII PR 33,
MOSCOW 117071, RUSSIA (Reprint); UNIV MUNICH, DEPT CLIN
CHEM & CLIN BIOCHEM, D-80336 MUNICH, GERMANY
COUNTRY OF AUTHOR: RUSSIA; GERMANY
SOURCE: BIOCHEMISTRY-MOSCOW, (NOV 1999) Vol. 64, No. 11, pp.
1258-1265.
Publisher: PLENUM PUBL CORP, CONSULTANTS BUREAU, 233
SPRING ST, NEW YORK, NY 10013.
ISSN: 0006-2979.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 37
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L13 ANSWER 42 OF 49 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN

ACCESSION NUMBER: 1999237878 EMBASE
TITLE: Urinary trypsin inhibitor down-regulates hyaluronic acid
fragment- induced prostanoid release in cultured
human amnion cells by inhibiting cyclo-oxygenase-2
expression.
AUTHOR: Kobayashi H.; Guang Wei Sun; Terao T.
CORPORATE SOURCE: H. Kobayashi, Dept. of Obstetrics and Gynecology, Hamamatsu
Univ. School of Medicine, Handacho 3600, Hamamatsu,
Shizuoka 431-3192, Japan
SOURCE: Molecular Human Reproduction, (1999) 5/7 (662-667).
Refs: 36
ISSN: 1360-9947 CODEN: MHREFD
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 010 Obstetrics and Gynecology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

L13 ANSWER 43 OF 49 MEDLINE on STN
ACCESSION NUMBER: 1999346115 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10415139
TITLE: Lysosomal protease inhibitors induce meganeurites and
tangle-like structures in entorhinohippocampal regions
vulnerable to Alzheimer's disease.
AUTHOR: Bi X; Zhou J; Lynch G
CORPORATE SOURCE: Human Behavior, University of California, Irvine,
California, 92697-3800, USA.
CONTRACT NUMBER: AG00538 (NIA)
SOURCE: Experimental neurology, (1999 Aug) 158 (2) 312-27.
Journal code: 0370712. ISSN: 0014-4886.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199908
ENTRY DATE: Entered STN: 19990910
Last Updated on STN: 20020420
Entered Medline: 19990824

L13 ANSWER 44 OF 49 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN

ACCESSION NUMBER: 1998077035 EMBASE
TITLE: Relative increase in Alzheimer's disease of soluble forms

of cerebral A β amyloid protein precursor containing
the kunitz protease inhibitory domain.
AUTHOR: Moir R.D.; Lynch T.; Bush A.I.; Whyte S.; Henry A.;
Portbury S.; Multhaup G.; Small D.H.; Tanzi R.E.;
Beyreuther K.; Masters C.L.
CORPORATE SOURCE: C.L. Masters, Dept. of Pathology, University of Melbourne,
Parkville, Vic. 3052, Australia
SOURCE: Journal of Biological Chemistry, (27 Feb 1998) 273/9
(5013-5019).
Refs: 87
ISSN: 0021-9258 CODEN: JBCHA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 008 Neurology and Neurosurgery
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

L13 ANSWER 45 OF 49 MEDLINE on STN DUPLICATE 6
ACCESSION NUMBER: 1998227642 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9568691
TITLE: Evidence for involvement of the proteasome complex (26S)
and NFkappaB in IL-1beta-induced nitric oxide and
prostaglandin production by rat islets and RINm5F cells.
AUTHOR: Kwon G; Corbett J A; Hauser S; Hill J R; Turk J; McDaniel M
L
CORPORATE SOURCE: Department of Pathology, Washington University School of
Medicine, St. Louis, Missouri 63110-8118, USA.
CONTRACT NUMBER: DK-06181 (NIDDK)
DK-34338 (NIDDK)
T32-DK007296 (NIDDK)
SOURCE: Diabetes, (1998 Apr) 47 (4) 583-91.
Journal code: 0372763. ISSN: 0012-1797.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199805
ENTRY DATE: Entered STN: 19980514
Last Updated on STN: 19990129
Entered Medline: 19980507

L13 ANSWER 46 OF 49 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
STN
ACCESSION NUMBER: 1998:211462 BIOSIS
DOCUMENT NUMBER: PREV199800211462
TITLE: Bdellastasin, a **serine protease**
inhibitor of the antistasin family from the medical leech
(Hirudo medicinalis) - Primary structure, expression in
yeast, and characterisation of native and recombinant
inhibitor.
AUTHOR(S): Moser, Matthias; Auerswald, Ennes; Mentele, Reinhard;
Eckerskorn, Christoph; Fritz, Hans; Fink, Edwin [Reprint
author]
CORPORATE SOURCE: Abt. Klin. Chem. Klin. Biochem., Chir. Klin. Poliklin.,
Klin. Innenstadt Ludwig-Maximilians-Univ., Nussbaumstrasse
20, D-80336 Muenchen, Germany
SOURCE: European Journal of Biochemistry, (April, 1998) Vol. 253,
No. 1, pp. 212-220. print.
CODEN: EJBCAI. ISSN: 0014-2956.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 11 May 1998

Last Updated on STN: 11 May 1998

L13 ANSWER 47 OF 49 MEDLINE on STN DUPLICATE 7
ACCESSION NUMBER: 1998417542 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9743555
TITLE: Receptor-mediated activation of murine peritoneal
macrophages by antithrombin III acts as a costimulatory
signal for nitric oxide synthesis.
AUTHOR: Kwak J Y; Park S Y; Han M K; Lee H S; Sohn M H; Kim U H;
McGregor J R; Samlowski W E; Yim C Y
CORPORATE SOURCE: Department of Internal Medicine, Chonbuk National
University Medical School, Chonju, Chonbuk, 560-182, Korea.
CONTRACT NUMBER: CA67404 (NCI)
SOURCE: Cellular immunology, (1998 Aug 25) 188 (1) 33-40.
Journal code: 1246405. ISSN: 0008-8749.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199810
ENTRY DATE: Entered STN: 19981029
Last Updated on STN: 19981029
Entered Medline: 19981016

L13 ANSWER 48 OF 49 MEDLINE on STN
ACCESSION NUMBER: 94057824 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8239280
TITLE: Expression of L-APP mRNA in brain cells.
AUTHOR: Sandbrink R; Banati R; Masters C L; Beyreuther K; Konig G
CORPORATE SOURCE: Zentrum fur Molekulare Biologie, Universitat Heidelberg,
Germany.
SOURCE: Annals of the New York Academy of Sciences, (1993 Sep 24)
695 183-9. Ref: 13
Journal code: 7506858. ISSN: 0077-8923.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199312
ENTRY DATE: Entered STN: 19940117
Last Updated on STN: 19980206
Entered Medline: 19931210

L13 ANSWER 49 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:674455 HCAPLUS
DOCUMENT NUMBER: 115:274455
TITLE: Ser-His-Glu triad forms the catalytic site of the
lipase from Geotrichum candidum
AUTHOR(S): Schrag, Joseph D.; Li, Yunge; Wu, Shan; Cygler,
Mirosław
CORPORATE SOURCE: Biotechnol. Res. Inst., Natl. Res. Coun. Canada,
Montreal, QC, H4P 2R2, Can.
SOURCE: Nature (London, United Kingdom) (1991), 351(6329),
761-4
CODEN: NATUAS; ISSN: 0028-0836
DOCUMENT TYPE: Journal
LANGUAGE: English

=> d his

(FILE 'HOME' ENTERED AT 15:50:53 ON 15 MAR 2005)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:51:18 ON 15 MAR 2005

L1 590888 S PROTEINASE? OR PROTEASE?
L2 372973 S SERINE
L3 83547 S L1(A)L2
L4 35890 S HUMAN AND L3
L5 9 S "HELA2"
L6 312121 S ISOFORM?
L7 6 DUP REM L5 (3 DUPLICATES REMOVED)
L8 76 S TESTISIN
L9 63 S L4 AND L8
L10 25 DUP REM L9 (38 DUPLICATES REMOVED)
L11 3249 S L4 AND "L"
L12 74 S L6 AND L11
L13 49 DUP REM L12 (25 DUPLICATES REMOVED)

=> s tumor(a)suppressor

L14 137987 TUMOR(A) SUPPRESSOR

=> s l8 and l14

L15 14 L8 AND L14

=> dup rem l15

PROCESSING COMPLETED FOR L15

L16 6 DUP REM L15 (8 DUPLICATES REMOVED)

=> d 1-6 ibib ab'

'AB'' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d 1-6 ibib ab

L16 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:151653 HCAPLUS

TITLE: Hypermethylation of the 5' CpG island of the gene encoding the serine protease **Testisin** promotes its loss in testicular tumorigenesis

AUTHOR(S): Manton, K. J.; Douglas, M. L.; Netzel-Arnett, S.; Fitzpatrick, D. R.; Nicol, D. L.; Boyd, A. W.; Clements, J. A.; Antalis, T. M.

CORPORATE SOURCE: Leukaemia Foundation and Cellular Oncology Laboratories, Queensland Institute of Medical Research, Australia

SOURCE: British Journal of Cancer (2005), 92(4), 760-769
CODEN: BJCAAI; ISSN: 0007-0920

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The **Testisin** gene (PRSS21) encodes a glycosylphosphatidylinositol (GPI)-linked serine protease that exhibits testis tissue-specific expression. Loss of **Testisin** has been implicated in testicular tumorigenesis, but its role in testis biol. and tumorigenesis is not known. Here we have investigated the role of CpG methylation in **Testisin** gene inactivation and tested the hypothesis that **Testisin** may act as a **tumor suppressor** for testicular tumorigenesis. Using sequence anal. of bisulphite-treated genomic DNA, we find a strong relationship between

hypermethylation of a 385 bp 5' CpG rich island of the **Testisin** gene, and silencing of the **Testisin** gene in a range of human tumor cell lines and in 100% (eight/eight) of testicular germ cell tumors. We show that treatment of **Testisin**-neg. cell lines with demethylating agents and/or a histone deacetylase inhibitor results in reactivation of **Testisin** gene expression, implicating hypermethylation in **Testisin** gene silencing. Stable expression of **Testisin** in the **Testisin**-neg. Tera-2 testicular cancer line suppressed tumorigenicity as revealed by inhibition of both anchorage-dependent cell growth and tumor formation in an SCID mouse model of testicular tumorigenesis. Together, these data show that loss of **Testisin** is caused, at least in part, by DNA hypermethylation and histone deacetylation, and suggest a **tumor suppressor** role for **Testisin** in testicular tumorigenesis. British Journal of Cancer (2005) 92, 760-769.

L16 ANSWER 2 OF 6 MEDLINE on STN DUPLICATE 1
 ACCESSION NUMBER: 2001247166 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 11231276
 TITLE: Organization and chromosomal localization of the murine **Testisin** gene encoding a serine protease temporally expressed during spermatogenesis.
 AUTHOR: Scarman A L; Hooper J D; Boucaut K J; Sit M L; Webb G C; Normyle J F; Antalis T M
 CORPORATE SOURCE: The Queensland Institute of Medical Research and the Experimental Oncology Program, University of Queensland, Brisbane, Australia.
 SOURCE: European journal of biochemistry / FEBS, (2001 Mar) 268 (5) 1250-8.
 Journal code: 0107600. ISSN: 0014-2956.
 PUB. COUNTRY: Germany: Germany, Federal Republic of
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 OTHER SOURCE: GENBANK-AF304012; GENBANK-AY005145
 ENTRY MONTH: 200105
 ENTRY DATE: Entered STN: 20010517
 Last Updated on STN: 20010517
 Entered Medline: 20010510

AB The recently characterized human serine protease, **Testisin**, is expressed on premeiotic testicular germ cells and is a candidate type II **tumor suppressor** for testicular cancer. Here we report the cloning, characterization and expression of the gene encoding mouse **Testisin**, Prss21. The murine **Testisin** gene comprises six exons and five introns and spans approximately 5 kb of genomic DNA with an almost identical structure to the human **Testisin** gene, PRSS21. The gene was localized to murine chromosome 17 A3.3-B; a region syntenic with the location of PRSS21 on human chromosome 16p13.3. Northern blot analyses of RNA from a range of adult murine tissues demonstrated a 1.3 kb mRNA transcript present only in testis. The murine **Testisin** cDNA shares 65% identity with human **Testisin** cDNA and encodes a putative pre-pro-protein of 324 amino acids with 80% similarity to human **Testisin**. The predicted amino-acid sequence includes an N-terminal signal sequence of 27 amino acids, a 27 amino-acid pro-region, a 251 amino-acid catalytic domain typical of a serine protease with trypsin-like specificity, and a C-terminal hydrophobic extension which is predicted to function as a membrane anchor. Immunostaining for murine **Testisin** in mouse testis demonstrated specific staining in the cytoplasm and on the plasma membrane of round and elongating spermatids. Examination of murine **Testisin** mRNA expression in developing sperm confirmed that the onset of murine **Testisin** mRNA expression occurred at approximately day 18 after birth, corresponding to the appearance of spermatids in the testis, in contrast

to the expression of human **Testisin** in spermatocytes. These data identify the murine ortholog to human **Testisin** and demonstrate that the murine **Testisin** gene is temporally regulated during murine spermatogenesis.

L16 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:1194 BIOSIS
DOCUMENT NUMBER: PREV200200001194
TITLE: The serine protease **testisin** functions as a tumor and/or growth suppressor in testicular tumorigenesis.
AUTHOR(S): Boucaut, Kerry Jane [Reprint author]; Douglas, Meaghan L.; Nicol, David L.; Pera, Martin F.; Clements, Judith A.; Antalis, Toni M.
CORPORATE SOURCE: CMB, Queensland University of Technology, Brisbane, QLD, Australia
kerryB@qimr.edu.au
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2001) Vol. 42, pp. 712. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer Research. New Orleans, LA, USA. March 24-28, 2001.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 28 Dec 2001
Last Updated on STN: 25 Feb 2002

L16 ANSWER 4 OF 6 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2000451880 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11004480
TITLE: Localization, expression and genomic structure of the gene encoding the human serine protease **testisin**.
AUTHOR: Hooper J D; Bowen N; Marshall H; Cullen L M; Sood R; Daniels R; Stüttgen M A; Normyle J F; Higgs D R; Kastner D L; Ogbourne S M; Pera M F; Jazwinska E C; Antalis T M
CORPORATE SOURCE: Cellular Oncology Laboratory, The Queensland Institute of Medical Research, Brisbane, Queensland 4029, Australia.
SOURCE: Biochimica et biophysica acta, (2000 Jun 21) 1492 (1) 63-71.
Journal code: 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF058301
ENTRY MONTH: 200010
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001031

AB **Testisin** is a recently identified human serine protease expressed by premeiotic testicular germ cells and is a candidate **tumor suppressor** for testicular cancer. Here, we report the characterization of the gene encoding **testisin**, designated PRSS21, and its localization on the short arm of human chromosome 16 (16p13.3) between the microsatellite marker D16S246 and the radiation hybrid breakpoint CY23HA. We have further refined the localization to cosmid 406D6 in this interval and have established that the gene is approximately 4.5 kb in length, and contains six exons and five intervening introns. The structure of PRSS21 is very similar to the human prostaticin gene (PRSS8) which maps nearby on 16p11.2, suggesting that these genes may have evolved through gene duplication. Sequence analysis showed that the two known isoforms of **testisin** are generated by

alternative pre-mRNA splicing. A major transcription initiation site was identified 97 nucleotides upstream of the **testisin** translation start and conforms to a consensus initiator element. The region surrounding the transcription initiation site lacks a TATA consensus sequence, but contains a CCAAT sequence and includes a CpG island. The 5'-flanking region contains several consensus response elements including Spl, AP1 and several testis-specific elements. Analysis of **testisin** gene expression in tumor cell lines shows that **testisin** is not expressed in testicular tumor cells but is aberrantly expressed in some tumor cell lines of non-testis origin. These data provide the basis for identifying potential genetic alterations of PRSS21 that may underlie both testicular abnormalities and tumorigenesis.

L16 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:444980 HCAPLUS

DOCUMENT NUMBER: 131:197773

TITLE: **Testisin**, a new human serine proteinase expressed by premeiotic testicular germ cells and lost in testicular germ cell tumors

AUTHOR(S): Hooper, John D.; Nicol, David L.; Dickinson, Joanne L.; Eyre, Helen J.; Scarman, Anthony L.; Normyle, John F.; Stuttgen, Melanie A.; Douglas, Meaghan L.; Loveland, Kate A. Lakoski; Sutherland, Grant R.; Antalis, Toni M.

CORPORATE SOURCE: Cellular Oncology Laboratory, University of Queensland Joint Oncology Program and Queensland Institute of Medical Research, Brisbane, Queensland, 4029, UK

SOURCE: Cancer Research (1999), 59(13), 3199-3205

CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: AACR Subscription Office

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors have cloned and characterized a cDNA encoding a new human serine proteinase, **testisin**, that is abundantly expressed only in the testis and is lost in testicular tumors. The **testisin** cDNA was identified by homol. cloning using degenerate primers directed at conserved sequence motifs within the catalytic regions of serine proteinases. It is 1073 nucleotides long, including 942 nucleotides of open reading frame and a 113-nucleotide 3' untranslated sequence. Northern and dot blot analyses of RNA from a range of normal human tissues revealed a 1.4-kb mRNA species that was present only in testis, which was not detected in eight of eight testicular tumors. **Testisin** cDNA is predicted to encode a protein of 314 amino acids, which consists of a 19-amino acid (aa) signal peptide, a 22-aa proregion, and a 273-aa catalytic domain, including a unique 17-aa COOH-terminal hydrophobic extension that is predicted to function as a membrane anchor. The deduced amino acid sequence of **testisin** shows 44% identity to prostasin and contains features that are typical of serine proteinases with trypsin-like substrate specificity. Antipeptide antibodies directed against the **testisin** polypeptide detected an immunoreactive **testisin** protein of Mr 35,000-39,000 in cell lysates from COS-7 cells that were transiently transfected with **testisin** cDNA. Immunostaining of normal testicular tissue showed that **testisin** was expressed in the cytoplasm and on the plasma membrane of premeiotic germ cells. No staining was detected in eight of eight germ cell-derived testicular tumors. In addition, the **testisin** gene was localized by fluorescence in situ hybridization to the short arm of human chromosome 16 (16p13.3), a region that has been associated with allelic imbalance and loss of heterozygosity in sporadic testicular tumors. These findings demonstrate a new cell surface serine proteinase, loss of which may have a direct or indirect role in the progression of testicular tumors of germ cell origin.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS

L16 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:568908 HCAPLUS

DOCUMENT NUMBER: 129:198890

TITLE: Cloning of human serine proteinases and a kinase involved in spermatogenesis and the suppression of testicular cancer

INVENTOR(S): Antalis, Toni Marie; Hooper, John David

PATENT ASSIGNEE(S): Amrad Operations Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 168 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9836054	A1	19980820	WO 1998-AU85	19980213
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9859734	A1	19980908	AU 1998-59734	19980213
US 6479274	B1	20021112	US 1998-23942	19980213
AU 774591	B2	20040701	AU 2000-72539	20001228
US 2003092154	A1	20030515	US 2002-40647	20020107
PRIORITY APPLN. INFO.:			AU 1997-5101	A 19970213
			AU 1997-422	A 19971118
			AU 1998-59734	A3 19980213
			US 1998-23942	A3 19980213
			WO 1998-AU85	W 19980213

AB The present invention relates novel proteinaceous mols. involved in or associated with regulation of cell activities and/or viability. The present invention is particularly directed to novel serine proteinases and a novel kinase and to derivs., agonists and antagonists thereof. PCR cloning isolated a human cDNA encoding a novel serine proteinase, referred to herein as HELA2 or **testisin**, which has roles in spermatogenesis, in suppressing testicular cancer, and as a marker for cancers.

Testisin is specifically expressed in the normal testis and is associated with sperm development; it is associated with tumors in non-testis

cell types and **testisin** mRNA and protein expression is absent in testicular germ cell tumors. The **testisin** gene was mapped to human chromosome 16p13.3, and is organized into 6 exons and 5 introns. Two forms of **testisin** are provided, based on alternative splicing. The **testisin** gene is associated with a gene cluster of homologous genes, designated SP001LA, SP002LA, and SP003LA. An addnl. serine proteinase, designated ATC2, and a kinase designated BCON3 were also provided by PCR cloning with the same primers.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:51:18 ON 15 MAR 2005

L1 590888 S PROTEINASE? OR PROTEASE?
L2 372973 S SERINE
L3 83547 S L1(A)L2
L4 35890 S HUMAN AND L3
L5 9 S "HELA2"
L6 312121 S ISOFORM?
L7 6 DUP REM L5 (3 DUPLICATES REMOVED)
L8 76 S TESTISIN
L9 63 S L4 AND L8
L10 25 DUP REM L9 (38 DUPLICATES REMOVED)
L11 3249 S L4 AND "L"
L12 74 S L6 AND L11
L13 49 DUP REM L12 (25 DUPLICATES REMOVED)
L14 137987 S TUMOR(A)SUPPRESSOR
L15 14 S L8 AND L14
L16 6 DUP REM L15 (8 DUPLICATES REMOVED)

=> e antalis t m/au

E1 1 ANTALIS PATRICIA LYNN/AU
E2 18 ANTALIS T/AU
E3 183 --> ANTALIS T M/AU
E4 1 ANTALIS T M */AU
E5 9 ANTALIS TONI/AU
E6 81 ANTALIS TONI M/AU
E7 6 ANTALIS TONI MARIE/AU
E8 1 ANTALK ISTVAN/AU
E9 5 ANTALKI T/AU
E10 1 ANTALL GLORIA F/AU
E11 40 ANTALL J/AU
E12 1 ANTALL K L/AU

=> s e3-e7

L17 280 ("ANTALIS T M"/AU OR "ANTALIS T M */AU OR "ANTALIS TONI"/AU OR
"ANTALIS TONI M"/AU OR "ANTALIS TONI MARIE"/AU)

=> e hooper d/au

E1 2 HOOPER CYNTHIA/AU
E2 7 HOOPER CYNTHIA L/AU
E3 267 --> HOOPER D/AU
E4 10 HOOPER D A/AU
E5 3 HOOPER D B/AU
E6 850 HOOPER D C/AU
E7 4 HOOPER D C */AU
E8 84 HOOPER D CRAIG/AU
E9 17 HOOPER D E/AU
E10 16 HOOPER D F/AU
E11 66 HOOPER D G/AU
E12 1 HOOPER D I/AU

=> s e3

L18 267 "HOOPER D"/AU

=> d his

(FILE 'HOME' ENTERED AT 15:50:53 ON 15 MAR 2005)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:51:18 ON 15 MAR 2005

L1 590888 S PROTEINASE? OR PROTEASE?
L2 372973 S SERINE
L3 83547 S L1(A)L2

L4 35890 S HUMAN AND L3
 L5 9 S "HELA2"
 L6 312121 S ISOFORM?
 L7 6 DUP REM L5 (3 DUPLICATES REMOVED)
 L8 76 S TESTISIN
 L9 63 S L4 AND L8
 L10 25 DUP REM L9 (38 DUPLICATES REMOVED)
 L11 3249 S L4 AND "L"
 L12 74 S L6 AND L11
 L13 49 DUP REM L12 (25 DUPLICATES REMOVED)
 L14 137987 S TUMOR(A) SUPPRESSOR
 L15 14 S L8 AND L14
 L16 6 DUP REM L15 (8 DUPLICATES REMOVED)
 E ANTALIS T M/AU
 L17 280 S E3-E7
 E HOOPER D/AU
 L18 267 S E3

=> s l17 or l18

L19 547 L17 OR L18

=> s l4 and l19

L20 100 L4 AND L19

=> s l20 and l8

L21 32 L20 AND L8

=> dup rem l21

PROCESSING COMPLETED FOR L21

L22 13 DUP REM L21 (19 DUPLICATES REMOVED)

=> d 1-13 ibib ab

L22 ANSWER 1 OF 13 MEDLINE on STN DUPLICATE 1
 ACCESSION NUMBER: 2005095048 IN-PROCESS
 DOCUMENT NUMBER: PubMed ID: 15685234
 TITLE: Hypermethylation of the 5' CpG island of the gene encoding the **serine protease Testisin** promotes its loss in testicular tumorigenesis.
 AUTHOR: Manton K J; Douglas M L; Netzel-Arnett S; Fitzpatrick D R; Nicol D L; Boyd A W; Clements J A; **Antalis T M**
 CORPORATE SOURCE: [1] 1Leukaemia Foundation and Cellular Oncology Laboratories, Queensland Institute of Medical Research, Queensland, Australia [2] 2School of Life Science, Queensland University of Technology, Queensland, Australia.
 SOURCE: British journal of cancer, (2005 Feb 28) 92 (4) 760-9. Journal code: 0370635. ISSN: 0007-0920.
 PUB. COUNTRY: England: United Kingdom
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: NONMEDLINE; IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
 ENTRY DATE: Entered STN: 20050224
 Last Updated on STN: 20050224
 AB The **Testisin** gene (PRSS21) encodes a glycosylphosphatidylinositol (GPI)-linked **serine protease** that exhibits testis tissue-specific expression. Loss of **Testisin** has been implicated in testicular tumorigenesis, but its role in testis biology and tumorigenesis is not known. Here we have investigated the role of CpG methylation in **Testisin** gene inactivation and tested the hypothesis that **Testisin** may act as a tumour suppressor for testicular tumorigenesis. Using sequence analysis of bisulphite-treated genomic DNA, we find a strong relationship between

hypermethylation of a 385 bp 5' CpG rich island of the **Testisin** gene, and silencing of the **Testisin** gene in a range of **human** tumour cell lines and in 100% (eight/eight) of testicular germ cell tumours. We show that treatment of **Testisin**-negative cell lines with demethylating agents and/or a histone deacetylase inhibitor results in reactivation of **Testisin** gene expression, implicating hypermethylation in **Testisin** gene silencing. Stable expression of **Testisin** in the **Testisin**-negative Tera-2 testicular cancer line suppressed tumorigenicity as revealed by inhibition of both anchorage-dependent cell growth and tumour formation in an SCID mouse model of testicular tumorigenesis. Together, these data show that loss of **Testisin** is caused, at least in part, by DNA hypermethylation and histone deacetylation, and suggest a tumour suppressor role for **Testisin** in testicular tumorigenesis. British Journal of Cancer (2005) 92, 760-769. doi:10.1038/sj.bjc.6602373 www.bjccancer.com Published online 1 February 2005.

L22 ANSWER 2 OF 13 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 2

ACCESSION NUMBER: 2004:438005 BIOSIS
DOCUMENT NUMBER: PREV200400438138
TITLE: . On the biological function of **testisin**: A membrane **serine protease** expressed specifically during spermatogenesis.
AUTHOR(S): Netzel-Arnett, S.; Haudenschild, C. C.; Bugge, T. H.;
Antalis, T. M.
SOURCE: Journal of Andrology, (March 2004) No. Suppl. S, pp. 55.
print.
Meeting Info.: 29th Annual Meeting of the American Society of Andrology. Baltimore, MD, USA. April 17-20, 2004.
American Society of Andrology.
ISSN: 0196-3635 (ISSN print).
DOCUMENT TYPE: Conference; (Meeting)
Conference; (Meeting Poster)
LANGUAGE: English
ENTRY DATE: Entered STN: 17 Nov 2004
Last Updated on STN: 17 Nov 2004

L22 ANSWER 3 OF 13 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 2003111572 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12624642
TITLE: . Endothelial cell **serine proteases** expressed during vascular morphogenesis and angiogenesis.
AUTHOR: Aimes Ronald T; Zijlstra Andries; Hooper John D; Ogbourne Steven M; Sit Mae-Ie; Fuchs Simone; Gotley David C; Quigley James P; **Antalis Toni M**
CORPORATE SOURCE: Department of Cell Biology, The Scripps Research Institute, La Jolla, California, USA.
CONTRACT NUMBER: P01 HL31950 (NHLBI)
R01 CA65660 (NCI)
T32 HL07695 (NHLBI)
SOURCE: Thrombosis and haemostasis, (2003 Mar) 89 (3) 561-72.
Journal code: 7608063. ISSN: 0340-6245.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200310
ENTRY DATE: Entered STN: 20030308
Last Updated on STN: 20031031
Entered Medline: 20031030

AB Many **serine proteases** play important regulatory roles in complex biological systems, but only a few have been linked directly

with capillary morphogenesis and angiogenesis. Here we provide evidence that **serine protease** activities, independent of the plasminogen activation cascade, are required for microvascular endothelial cell reorganization and capillary morphogenesis in vitro. A homology cloning approach targeting conserved motifs present in all **serine proteases**, was used to identify candidate **serine proteases** involved in these processes, and revealed 5 genes (acrosin, **testisin**, neurosin, PSP and neurotrypsin), none of which had been associated previously with expression in endothelial cells. A subsequent gene-specific RT-PCR screen for 22 **serine proteases** confirmed expression of these 5 genes and identified 7 additional **serine protease** genes expressed by **human** endothelial cells, urokinase-type plasminogen activator, protein C, TMPRSS2, hepsin, matriptase/MT-SP1, dipeptidylpeptidase IV, and seprase. Differences in **serine protease** gene expression between microvascular and **human** umbilical vein endothelial cells (HUVECs) were identified and several **serine protease** genes were found to be regulated by the nature of the substratum, ie. artificial basement membrane or fibrillar type I collagen. mRNA transcripts of several **serine protease** genes were associated with blood vessels in vivo by in situ hybridization of **human** tissue specimens. These data suggest a potential role for **serine proteases**, not previously associated with endothelium, in vascular function and angiogenesis.

L22 ANSWER 4 OF 13 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN

ACCESSION NUMBER: 2003193798 EMBASE
TITLE: Membrane anchored **serine proteases**: A rapidly expanding group of cell surface proteolytic enzymes with potential roles in cancer.
AUTHOR: Netzel-Arnett S.; Hooper J.D.; Szabo R.; Madison E.L.; Quigley J.P.; Bugge T.H.; **Antalis T.M.**
CORPORATE SOURCE: United States. antalist@usa.redcross.org
SOURCE: Cancer and Metastasis Reviews, (2003) 22/2-3 (237-258).
Refs: 146
ISSN: 0167-7659 CODEN: CMRED4
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
016 Cancer
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Dysregulated proteolysis is a hallmark of cancer. Malignant cells require a range of proteolytic activities to enable growth, survival, and expansion. **Serine proteases** of the S1 or trypsin-like family have well recognized roles in the maintenance of normal homeostasis as well as in the pathology of diseases such as cancer. Recently a rapidly expanding subgroup of S1 proteases has been recognized that are directly anchored to plasma membranes. These membrane anchored **serine proteases** are anchored either via a carboxy-terminal transmembrane domain (Type I), a carboxy terminal hydrophobic region that functions as a signal for membrane attachment via a glycosyl-phosphatidylinositol linkage (GPI-anchored), or via an amino terminal proximal transmembrane domain (Type II or TTSP). The TTSPs also encode multiple domains in their stem regions that may function in regulatory interactions. The **serine protease** catalytic domains of these enzymes show high homology but also possess features indicating unique substrate specificities. It is likely that the membrane anchored **serine proteases** have evolved to perform complex functions in the regulation of cellular signaling events at the plasma membrane and within the extracellular matrix. Disruption or mutation of several of the genes encoding these

proteases are associated with disease. Many of the membrane anchored **serine proteases** show restricted tissue distribution in normal cells, but their expression is widely dysregulated during tumor growth and progression. Diagnostic or therapeutic targeting of the membrane anchored **serine proteases** has potential as promising new approaches for the treatment of cancer and other diseases.

L22 ANSWER 5 OF 13 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:42593 BIOSIS
DOCUMENT NUMBER: PREV200300042593
TITLE: DNA molecules encoding **human HELA2 or testisin serine proteinases**.
AUTHOR(S): **Antalis, Toni Marie** [Inventor, Reprint Author];
Hooper, John David [Inventor]
CORPORATE SOURCE: Toowong, Australia
ASSIGNEE: Amrad Operations Pty., Ltd., Victoria, Australia
PATENT INFORMATION: US 6479274 November 12, 2002
SOURCE: Official Gazette of the United States Patent and Trademark
Office Patents, (Nov 12 2002) Vol. 1264, No. 2.
<http://www.uspto.gov/web/menu/patdata.html>. e-file.
ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Jan 2003
Last Updated on STN: 15 Jan 2003

AB The present invention related generally to novel molecules and more particularly novel proteinaceous molecules involved in or associated with regulation of cell activities and/or viability. The present invention is particularly directed to novel **serine proteinases** and a novel kinase and to derivatives, agonists and antagonists thereof. In one embodiment, the present invention provides a novel **serine proteinase**, referred to herein as "HELA2" or "**testisin**", which has roles in spermatogenesis, in suppressing testicular cancer and as a marker for cancers.

L22 ANSWER 6 OF 13 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 2001247166 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11231276
TITLE: Organization and chromosomal localization of the murine **Testisin** gene encoding a **serine protease** temporally expressed during spermatogenesis.
AUTHOR: Scarman A L; Hooper J D; Boucaut K J; Sit M L; Webb G C; Normyle J F; **Antalis T M**
CORPORATE SOURCE: The Queensland Institute of Medical Research and the Experimental Oncology Program, University of Queensland, Brisbane, Australia.
SOURCE: European journal of biochemistry / FEBS, (2001 Mar) 268 (5) 1250-8.
Journal code: 0107600. ISSN: 0014-2956.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF304012; GENBANK-AY005145
ENTRY MONTH: 200105
ENTRY DATE: Entered STN: 20010517
Last Updated on STN: 20010517
Entered Medline: 20010510

AB The recently characterized **human serine protease, Testisin**, is expressed on premeiotic testicular germ cells and is a candidate type II tumor suppressor for testicular cancer. Here we report the cloning, characterization and

expression of the gene encoding mouse **Testisin**, Prss21. The murine **Testisin** gene comprises six exons and five introns and spans approximately 5 kb of genomic DNA with an almost identical structure to the **human Testisin** gene, PRSS21. The gene was localized to murine chromosome 17 A3.3-B; a region syntenic with the location of PRSS21 on **human** chromosome 16p13.3. Northern blot analyses of RNA from a range of adult murine tissues demonstrated a 1.3 kb mRNA transcript present only in testis. The murine **Testisin** cDNA shares 65% identity with **human Testisin** cDNA and encodes a putative pre-pro-protein of 324 amino acids with 80% similarity to **human Testisin**. The predicted amino-acid sequence includes an N-terminal signal sequence of 27 amino acids, a 27 amino-acid pro-region, a 251 amino-acid catalytic domain typical of a **serine protease** with trypsin-like specificity, and a C-terminal hydrophobic extension which is predicted to function as a membrane anchor. Immunostaining for murine **Testisin** in mouse testis demonstrated specific staining in the cytoplasm and on the plasma membrane of round and elongating spermatids. Examination of murine **Testisin** mRNA expression in developing sperm confirmed that the onset of murine **Testisin** mRNA expression occurred at approximately day 18 after birth, corresponding to the appearance of spermatids in the testis, in contrast to the expression of **human Testisin** in spermatocytes. These data identify the murine ortholog to **human Testisin** and demonstrate that the murine **Testisin** gene is temporally regulated during murine spermatogenesis.

L22 ANSWER 7 OF 13 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
 ACCESSION NUMBER: 2002:1194 BIOSIS
 DOCUMENT NUMBER: PREV200200001194
 TITLE: The **serine protease testisin**
 functions as a tumor and/or growth suppressor in testicular tumorigenesis.
 AUTHOR(S): Boucaut, Kerry Jane [Reprint author]; Douglas, Meaghan L.; Nicol, David L.; Pera, Martin F.; Clements, Judith A.;
Antalis, Toni M.
 CORPORATE SOURCE: CMB, Queensland University of Technology, Brisbane, QLD, Australia
 kerryB@qimr.edu.au
 SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2001) Vol. 42, pp. 712. print.
 Meeting Info.: 92nd Annual Meeting of the American Association for Cancer Research. New Orleans, LA, USA. March 24-28, 2001.
 ISSN: 0197-016X.
 DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LANGUAGE: English
 ENTRY DATE: Entered STN: 28 Dec 2001
 Last Updated on STN: 25 Feb 2002

L22 ANSWER 8 OF 13 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
 ACCESSION NUMBER: 2000:238467 BIOSIS
 DOCUMENT NUMBER: PREV200000238467
 TITLE: Localization, structure and regulation of the **human** PRSS14 gene encoding the **serine**
proteinase testisin.
 AUTHOR(S): **Antalis, Toni M.** [Reprint author]; Boucaut, Kerry B. [Reprint author]; Normyle, John F. [Reprint author]; Fitzpatrick, Dave R. [Reprint author]; Hooper, John D. [Reprint author]
 CORPORATE SOURCE: Queensland Institute of Med Res, Brisbane, QLD, Australia
 SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2000) No. 41, pp. 348. print.

Meeting Info.: 91st Annual Meeting of the American
Association for Cancer Research. San Francisco, California,
USA. April 01-05, 2000.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Jun 2000
Last Updated on STN: 5 Jan 2002

L22 ANSWER 9 OF 13 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 2000451880 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11004480
TITLE: Localization, expression and genomic structure of the gene
encoding the **human serine
protease testisin**.
AUTHOR: Hooper J D; Bowen N; Marshall H; Cullen L M; Sood R;
Daniels R; Stuttgen M A; Normyle J F; Higgs D R; Kastner D
L; Ogbourne S M; Pera M F; Jazwinska E C; **Antalis T
M**
CORPORATE SOURCE: Cellular Oncology Laboratory, The Queensland Institute of
Medical Research, Brisbane, Queensland 4029, Australia.
SOURCE: Biochimica et biophysica acta, (2000 Jun 21) 1492 (1)
63-71.
Journal code: 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF058301
ENTRY MONTH: 200010
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001031

AB **Testisin** is a recently identified **human serine
protease** expressed by premeiotic testicular germ cells and is a
candidate tumor suppressor for testicular cancer. Here, we report the
characterization of the gene encoding **testisin**, designated
PRSS21, and its localization on the short arm of **human**
chromosome 16 (16p13.3) between the microsatellite marker D16S246 and the
radiation hybrid breakpoint CY23HA. We have further refined the
localization to cosmid 406D6 in this interval and have established that
the gene is approximately 4.5 kb in length, and contains six exons and
five intervening introns. The structure of PRSS21 is very similar to the
human prostatic gene (PRSS8) which maps nearby on 16p11.2,
suggesting that these genes may have evolved through gene duplication.
Sequence analysis showed that the two known isoforms of **testisin**
are generated by alternative pre-mRNA splicing. A major transcription
initiation site was identified 97 nucleotides upstream of the
testisin translation start and conforms to a consensus initiator
element. The region surrounding the transcription initiation site lacks a
TATA consensus sequence, but contains a CCAAT sequence and includes a CpG
island. The 5'-flanking region contains several consensus response
elements including Sp1, AP1 and several testis-specific elements.
Analysis of **testisin** gene expression in tumor cell lines shows
that **testisin** is not expressed in testicular tumor cells but is
aberrantly expressed in some tumor cell lines of non-testis origin. These
data provide the basis for identifying potential genetic alterations of
PRSS21 that may underlie both testicular abnormalities and tumorigenesis.

L22 ANSWER 10 OF 13 MEDLINE on STN DUPLICATE 6
ACCESSION NUMBER: 1999323395 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10397266

TITLE: **Testisin**, a new **human serine proteinase** expressed by premeiotic testicular germ cells and lost in testicular germ cell tumors.

AUTHOR: Hooper J D; Nicol D L; Dickinson J L; Eyre H J; Scarman A L; Normyle J F; Stuttgen M A; Douglas M L; Loveland K A; Sutherland G R; **Antalis T M**

CORPORATE SOURCE: Cellular Oncology Laboratory, University of Queensland Joint Oncology Program and Queensland Institute of Medical Research, Brisbane, Australia.

SOURCE: Cancer research, (1999 Jul 1) 59 (13) 3199-205.
Journal code: 2984705R. ISSN: 0008-5472.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199907

ENTRY DATE: Entered STN: 19990806
Last Updated on STN: 20000303
Entered Medline: 19990728

AB We have cloned and characterized a cDNA encoding a new **human serine proteinase**, **testisin**, that is abundantly expressed only in the testis and is lost in testicular tumors. The **testisin** cDNA was identified by homology cloning using degenerate primers directed at conserved sequence motifs within the catalytic regions of **serine proteinases**. It is 1073 nucleotides long, including 942 nucleotides of open reading frame and a 113-nucleotide 3' untranslated sequence. Northern and dot blot analyses of RNA from a range of normal **human** tissues revealed a 1.4-kb mRNA species that was present only in testis, which was not detected in eight of eight testicular tumors. **Testisin** cDNA is predicted to encode a protein of 314 amino acids, which consists of a 19-amino acid (aa) signal peptide, a 22-aa proregion, and a 273-aa catalytic domain, including a unique 17-aa COOH-terminal hydrophobic extension that is predicted to function as a membrane anchor. The deduced amino acid sequence of **testisin** shows 44% identity to prostasin and contains features that are typical of **serine proteinases** with trypsin-like substrate specificity. Antipeptide antibodies directed against the **testisin** polypeptide detected an immunoreactive **testisin** protein of Mr 35,000-39,000 in cell lysates from COS-7 cells that were transiently transfected with **testisin** cDNA. Immunostaining of normal testicular tissue showed that **testisin** was expressed in the cytoplasm and on the plasma membrane of premeiotic germ cells. No staining was detected in eight of eight germ cell-derived testicular tumors. In addition, the **testisin** gene was localized by fluorescence in situ hybridization to the short arm of **human** chromosome 16 (16p13.3), a region that has been associated with allelic imbalance and loss of heterozygosity in sporadic testicular tumors. These findings demonstrate a new cell surface **serine proteinase**, loss of which may have a direct or indirect role in the progression of testicular tumors of germ cell origin.

L22 ANSWER 11 OF 13 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:533096 SCISEARCH

THE GENUINE ARTICLE: 211CA

TITLE: **Testisin**, a new **human serine proteinase** expressed by premeiotic testicular germ cells.

AUTHOR: Scarman A L (Reprint); Hooper J D; Normyle J F; Nicol D; **Antalis T M**

CORPORATE SOURCE: QUEENSLAND INST MED RES, CELLULAR ONCOL LAB, BRISBANE, QLD 4006, AUSTRALIA; UNIV QUEENSLAND, BRISBANE, QLD, AUSTRALIA; PRINCESS ALEXANDRA HOSP, WOOLLOONGABBA, QLD

4102, AUSTRALIA
 COUNTRY OF AUTHOR: AUSTRALIA
 SOURCE: BIOLOGY OF REPRODUCTION, (JUL 1999) Vol. 60, Supp. [1],
 pp. 528-528.
 Publisher: SOC STUDY REPRODUCTION, 1603 MONROE ST,
 MADISON, WI 53711-2021.
 ISSN: 0006-3363.
 DOCUMENT TYPE: Conference; Journal
 FILE SEGMENT: LIFE
 LANGUAGE: English
 REFERENCE COUNT: 0

L22 ANSWER 12 OF 13 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
 STN

ACCESSION NUMBER: 1999:405519 BIOSIS
 DOCUMENT NUMBER: PREV199900405519
 TITLE: **Testisin**, a new **human serine**
proteinase expressed by premeiotic testicular germ
 cells.
 AUTHOR(S): Scarman, A. L. [Reprint author]; Hooper, J. D. [Reprint
 author]; Normyle, J. F. [Reprint author]; Nicol, D.;
Antalis, T. M. [Reprint author]
 CORPORATE SOURCE: Cellular Oncology Laboratory, Queensland Institute of
 Medical Research, Brisbane, QLD, Australia
 SOURCE: Biology of Reproduction, (1999) Vol. 60, No. SUPPL. 1, pp.
 257. print.
 Meeting Info.: Thirty-Second Annual Meeting of the Society
 for the Study of Reproduction. Pullman, Washington, USA.
 July 31-August 3, 1999. Society for the Study of
 Reproduction.
 CODEN: BIREBV. ISSN: 0006-3363.
 DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LANGUAGE: English
 ENTRY DATE: Entered STN: 8 Oct 1999
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L22 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:568908 HCAPLUS
 DOCUMENT NUMBER: 129:198890
 TITLE: Cloning of **human serine**
proteinases and a kinase involved in
 spermatogenesis and the suppression of testicular
 cancer
 INVENTOR(S): **Antalis, Toni Marie**; Hooper, John David
 PATENT ASSIGNEE(S): Amrad Operations Pty. Ltd., Australia
 SOURCE: PCT Int. Appl., 168 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9836054	A1	19980820	WO 1998-AU85	19980213
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,			
	DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,			
	KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,			
	NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,			
	UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,			
	FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,			

	GA, GN, ML, MR, NE, SN, TD, TG			
AU 9859734	A1	19980908	AU 1998-59734	19980213
US 6479274	B1	20021112	US 1998-23942	19980213
AU 774591	B2	20040701	AU 2000-72539	20001228
US 2003092154	A1	20030515	US 2002-40647	20020107
PRIORITY APPLN. INFO.:			AU 1997-5101	A 19970213
			AU 1997-422	A 19971118
			AU 1998-59734	A3 19980213
			US 1998-23942	A3 19980213
			WO 1998-AU85	W 19980213

AB The present invention relates novel proteinaceous mols. involved in or associated with regulation of cell activities and/or viability. The present invention is particularly directed to novel **serine proteinases** and a novel kinase and to derivs., agonists and antagonists thereof. PCR cloning isolated a **human** cDNA encoding a novel **serine proteinase**, referred to herein as HELA2 or **testisin**, which has roles in spermatogenesis, in suppressing testicular cancer, and as a marker for cancers. **Testisin** is specifically expressed in the normal testis and is associated with sperm development; it is associated with tumors in non-testis cell types and **testisin** mRNA and protein expression is absent in testicular germ cell tumors. The **testisin** gene was mapped to **human** chromosome 16p13.3, and is organized into 6 exons and 5 introns. Two forms of **testisin** are provided, based on alternative splicing. The **testisin** gene is associated with a gene cluster of homologous genes, designated SP001LA, SP002LA, and SP003LA. An addnl. **serine proteinase**, designated ATC2, and a kinase designated BCON3 were also provided by PCR cloning with the same primers.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 15:50:53 ON 15 MAR 2005)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:51:18 ON 15 MAR 2005

L1	590888	S	PROTEINASE? OR PROTEASE?
L2	372973	S	SERINE
L3	83547	S	L1(A)L2
L4	35890	S	HUMAN AND L3
L5	9	S	"HELA2"
L6	312121	S	ISOFORM?
L7	6	DUP REM	L5 (3 DUPLICATES REMOVED)
L8	76	S	TESTISIN
L9	63	S	L4 AND L8
L10	25	DUP REM	L9 (38 DUPLICATES REMOVED)
L11	3249	S	L4 AND "L"
L12	74	S	L6 AND L11
L13	49	DUP REM	L12 (25 DUPLICATES REMOVED)
L14	137987	S	TUMOR(A)SUPPRESSOR
L15	14	S	L8 AND L14
L16	6	DUP REM	L15 (8 DUPLICATES REMOVED)
			E ANTALIS T M/AU

L17	280 S E3-E7
	E HOOPER D/AU
L18	267 S E3
L19	547 S L17 OR L18
L20	100 S L4 AND L19
L21	32 S L20 AND L8
L22	13 DUP REM L21 (19 DUPLICATES REMOVED)